

A BOOK OF
Drawing, Limning, Washing

Or Colouring of

MAPS and PRINTS

And the Art of *PAINTING*, with the
Names and Mixtures of Colours used by the Picture-Drawers.

OR,

The Young-mans Time well Spent.

IN WHICH

He hath the Ground-work to make him fit for doing any thing by
hand, when he is able to draw well.

By the Use of this work, you may draw all parts of a Man, Leggs, Armes,
Hands and Feet, severally and together. And Directions for Birds,
Beasts, Landskips, Ships, and the like.

Moreover,

Grounds to lay Silver or Gold upon; and how Silver or Gold shall be laid
or Limned upon Size; and the way to temper Gold and Silver, and other
mettals, and divers kinds of colours, to write, or to Limne withal upon
Vellum, Parchment, or Paper, and how to lay them upon the work which
thou intendest to make; and how to varnish it when thou hast done.

HOW ALSO

To Diaper and Shadow things, and to highten them, to stand off:
to Deepen them, and make them Glister.

In this BOOK

You have the necessary Instruments for Drawing, and the use of them;
and how to make Artificial Pastiles to draw withal.

Very Useful for all Handicrafts, and Ingenuous Gentlemen and Youths.

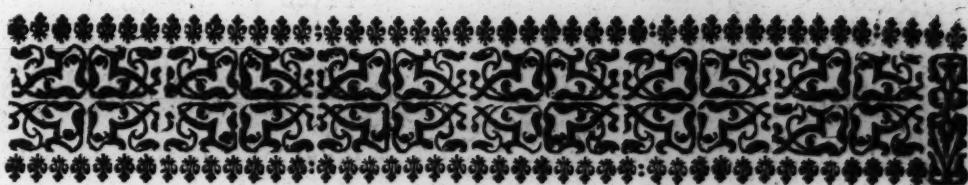
By Hammer and Hand, all Arts do stand.

Infelix qui Pauca Sapit, spernitque Doceri.

L O N D O N,

Printed by *M. Simmons*, for *Thomas Jenner*; and are to be sold at his Shop
at the South Entrance of the Royal Exchange, 1666.

ROGER L. ESTRANGE.



*To make a double Size, or bottome, to lay or settle Silver
or Gold upon, called an embossed ground.*



TAKE Venis Cereuse, white lead, the Plaister of an old Image or chalk, any of these made in fine powder, and then ground with the glayr of an egge and a little water on a Painters stone maketh a good bottome to lay under Silver. But when you shall use any of them to lay under Gold, do to it a little Saffron, therewith to make it somewhat yellow, but beware you put not too much water thereto, for then will it be over weak, and if you do overmuch glayr to it, then will it be over stiffe, therefore mingle it with discretion, and look thy size be thick standing, and set thy size thus tempered and covered in a horn or a shell in some Cellar or shadowed place, or under the earth, where it may stand moist for the space of seven days, until it be perfect clammy and rotten, and every day once stir it about, and you shall well understand that all the sizes the elder they be, and the more clammy and rotten they be, the better they be, for all the craft is in well making and tempering of the size, and if there stand any bells upon the size, put in ear wax, for it is a remedy therefore; and before you lay it on your work, first lay the size on a scrow and dry it, and when it is dry bend it, and if it bend and break not, then it is good and perfect; and if it break, put thereto a little water to make it weaker, and prove if it cleaveth fast to the book, and if it do not, then put glayr thereto, and make it more stedfast. The like size may you make with Gypsum, boole Almoniak, red or yellow Oker, Orpiment or Masticor, with brown of Spaine, or with red lead, ~~it every of them be ground by himself, and tempered, and ordered in like manner~~ and form above written.

*To make a thin Size, or bottome, to lay or settle Silver or Gold upon,
called a single ground.*

TAKE the new shreds of gloves leather, or of new parchment, for that is best, and seeth them in fair water from a quart to a pint, that the liquor be somewhat thick and clammy between your fingers, then strain the liquor from the shreds, and put it being hot in some stone vessel, and so work it forth before it be cold, and when you lay on silver or gold, see that your size be neither too moist, nor too dry, but in a mean between both, for dread of impairing your work. The like size may you make (without heating them at the fire) of glew water made of parchment glew for that is best, or with water gummed somewhat thick with gum Arabeck or of good old glayr, or with the milk of green figs alone, or with the milk of spounge or of warrwade, or with the yellow milk of green Salendine, or with the juice of garlick, Onyon heads, or water and grease of snailles. Upon every of these may you lay your leaves of silver or gold, having regard that your ground be neither too moist nor too dry, when you shall lay or settle the same thereupon.

To lay a double Size on letters or upon other things.

YOU shall with a Pensil made of grey aymes or caliber tails lay on thy size somewhat substantially, or if thou wilt first thin, and after thicker, and then dry it, and when it is dry wet it lightly with thy spittle, and then shave it with a sharp knife, until it be even without hills, and if there fall any default therein, or else there is more in one place than in another, lay again thy size on it, and dry it and ingross it as is said before, and when it is engrossed and made plain, then burnish it with the tooth of a Calf, or of an Oxe, or of a Horse, that is made therefore standing in

a crooked stick, and when it is burnished and made even and shining, then it is ready to lay on it thy Gold or thy Silver.

To keep whites of Egges so long as ye will, without corrupting or putting of Arsenick to them.

TAKE the whites of egges, not breaking them in any wise, but take out the cock-treading, and put to them as much of the best white-wine vinegar as shall suffice the quantity of the whites, leaving it so the space of two days, then passe it through some linnen cloth without breaking or heating the whites of the egges, leaving it so the space of eight days, then strain it again, and put it in a viol well stopp'd, to occupy for the purposes above written.

To temper Brazil, wherewith to write, florish, or Rule books.

TAKE Brazil finely scraped, or grossly beaten to powder, and put thereto the glair of an egge, or gum water, and a little Allum made in powder, and let them steep a night and a day, and then strain out the liquor, and keep it to the use aforesaid.

The manner how to flourish or Diaper with a Pensil over Silver or Gold.

IF you will Diaper over Gold, take yellow Oker, and therewith draw over thy Gold with a Pensil what thou wilt: If thou wilt Diaper upon Silver, take Cerase with a Pensil and draw or flourish what thou wilt over thy Silver. If thou wilt Diaper with Gold or Silver upon colours, take the juice of Garlick, with a Pensil draw over the Colours what thou wilt, then take and lay the Gold upon it, and press it down lightly with a hares tail, and let it dry half a day or more, then rub off the Gold which cleaveth not to the Garlick.

To make a kind of colouring called Varnish, wherewith you may varnish Gold, Silver, or any other colour or paintings, be it upon vellum, paper, timber, stone, lead, copper, glass, &c.

TAKE Bengewin, and bray it well betwixt two papers, then put it into a Viol, and pour upon it good Aquavita, that it be above the Bengewin three or four fingers, and let it steep for a day or two, then put it in for half a viol or two of Aquavita, five or six chives of saffron slenderly stemmed, this done, strain it, and with a Pensil varnish therewith any thing gilded, which will become bright and shining, drying it self immediately, and will continue the brightness many years. But if you will varnish on Silver, then take the Almon of Bengewin, that is to say, the white that is found in the midst of Bengewin, and dress it with Aquavita in the foresaid manner, leaving out the Saffron. And the said Varnish made with Bengewin and Aquavita only, is very good to varnish all things, as well painted as not painted, for it maketh tables and coffers of Walnut tree and Hebeny to glister if it be laid upon them, and all other things, as works of iron, copper, or tin, gilded or not gilded, for it maketh bright, preserveth, aideth the colour, and dryeth incontinent without taking any dust or filth, you may make it clean with a linnen cloth, or with wiping the work with a Fox tail, the which is better.

To make colours of all kind of mettals.

TAKE a bead of a Christal, or a Paragon stone, and beat each of them by himself in a brasen mortar to fine powder, then grind them dry each by himself on a Painters stone, until the powder be very fine and small, then grind them again on the same stone, each by himself with good glayr, and lay some one of them on the work with a Pen or a Pensil, and when it is well dyed, then rub it over with Gold, or with any other metall, and you shall have the same colour that the metall is of.

To make letters of the colour of Gold, without Gold.

TAKE one ounce of Orpiment and one ounce of fine Christal, and beat each of them by himself to powder in a brasen mortar. Then grind them well together with glayr upon a Painters stone, then it is perfect to write withal.

To make letters of the colour of silver, without Silver.

Take an ounce of Tin, two ounces of quick silver, and melt them together, and then grind them well upon a Painters stone with gum water, and write with it.

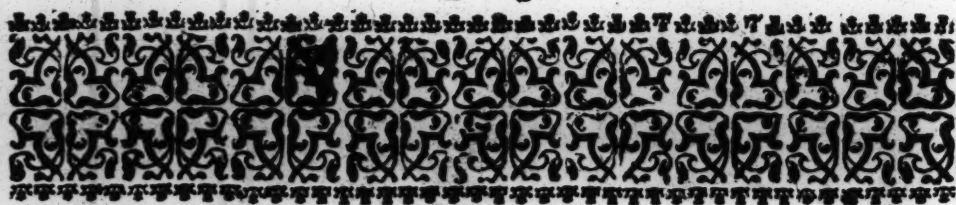
THE TRUE PORTRAITURE OF ALBRECHT DÜRER THE YETIE PRIME PAINTER AND GRAVEL OF GERMANY



Like Rembrandt
in
the
subject

A Booke of the Art of Drawing according to y^e order of Albert Durer; Hans Vozwin and
other excellent Picture-makers describing y^e true proportions of Men, women & Children.

Age 50 becs. sold.
by Thomas ...



Of necessary Instruments for Drawing.



Or Implements these are the only necessary ones ; Pens made of Ravens quills because, they are best to draw fair, and shadow fine, and small Charcoals, black-lead, white-lead, red-lead, a fether, and a pair of Compasses.

The use of these Instruments.

Charcoal.

FOr your Charcoals, they must be slit into small slender pieces, and then sharpened at the poynt. You may chuse your Charcoals thus, they are finer grain'd then others, and smooth when they are broken, and soft, and they have a pith in the middle of them, which is the best token to know them by : The use of them is to draw over your drafts first withal, because if you should draw it false at first, you may easily wipe it out, which you cannot so well do with any other thing.

Black-lead.

Your Black-lead is to draw over that again which you drew before in Charcoal, because this will not wipe out with your hands when you come to draw it with your pen ; and if you shall draw it with your pen before this, your Charcoal would surry your Pen that you could not write with it, and besides you cannot so well mend your faults with a pen as with a black-lead, for what you doe with your pen you cannot alter, but wherein you erre with your black-lead, you mend it with your Pen.

Pen.

The Pen is the Finisher of your work, with which you must be most exact, knowing it is unalterable, therefore you must be sure your work is right before you draw it with your Pen.

Black-chalk

Black-chalk is to draw on blew-paper with, which is not to be used till you be pretty perfect in drawing.

White-lead.

White-lead is to do the lightest parts of that you draw before with black-chalk.

Compasses.

Your Compasses are not to be used constantly, for they will spoyle you that you cannot draw without them, but only when you have finisht your drawing with Charcoal, you may measure if it be every where right, before you draw it with your black-lead.

Fether.

The Fether is to wipe out the Charcoal where it is drawn false, before you draw it again ; and this you must be sure to do, or else you will be confounded with variety of stroaks, so that you shall not know which is the right stroak.

Having these Implements in readinesse, The first practice of a Drawer will be readily to draw Circles, Ovals, Squares, Pyramids, &c. And the reason of exercising you first in these, is, because in these you will be fitted for the performance of other bodies ; as for example, your Circle will teach you to draw Spherical bodies, as the Sun, Moon and Stars, and the most Flowers, as the Rose, Dazy, &c. the most Vessels, as Cups, Basons, Bowls, Bottles, &c. the Square will fit you for all manner of compartments, plots, buildings, &c. your Pyramids for Sharp Steeple and Turrets, &c. your Ovals for Faces, Shields, &c. for it is impossible to draw the body of a Picture before you can draw the Abstract.

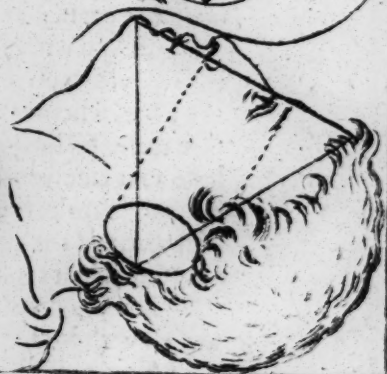
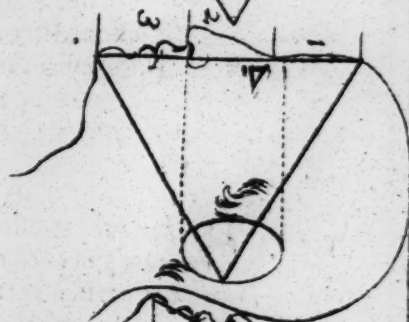
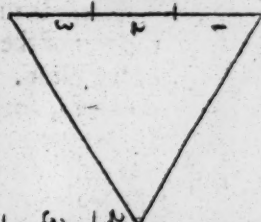
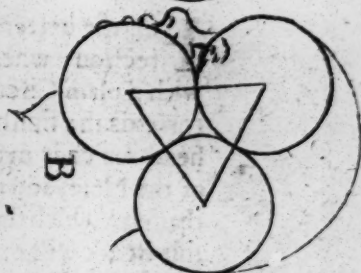
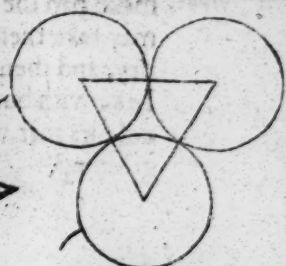
When you can do these, practice to draw Pots, Balls, Candlesticks, Pillars, a Cherry with a leafe, &c. but be sure you be perfect in the out-stroak, before you go to draw the shadows within.

How to make artificial Pastiles to draw withall.

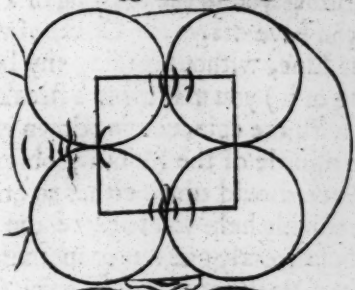
TAke a great Chalk-stone, and make deep furrows, or holes in them, two or three inches long, and so wide that you may lay in each a quill, then take white Chalk ground very fine, temper it with oyl or wort, and a little new milk, and so

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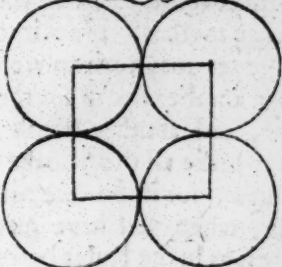
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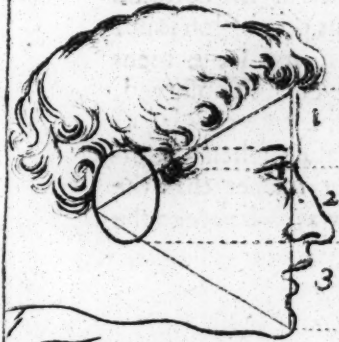
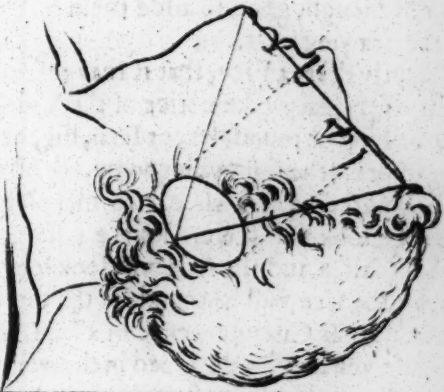
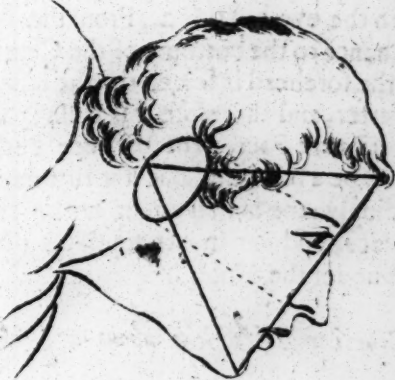
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make pap thereof, then poure it into the furrows of Chalk, and in a short time you may take them out and roul them up, or let them lye in them till they are quite dry, and then take them and scrape them into a handsome form: you may temper Lake with burnt Alabaſter for a Red, and ſo for others; having regard to ſome colours that will bind over-hard, which muſt have a little water put to them in their grinding.

Directions in drawing of a Face.

FOr the better aſſiſting you in the drawing of a Face, you may make uſe of this direction; when you have drawn the Circle of the Face (which you muſt do at firſt with a plain Circular Line, without making any bendings in or out, till you come towards the finiſhing of it) you may make a ſtroak down from that place of the forehead which is even with the chin, coming down where you ſhould place the middle of the Noſe, and the middle of the Mouth; obſerve that this ſtroak muſt be ſtruck that way which the Face ſhould turn, either to one ſide, or ſtraight right, and then this ſtroak will exceedingly help you to place the features rightly, that they may not ſtand all awry, but directly one under another; when you have made this ſtroak you may make another ſtroak acroſs to guide you for the even placing of the eyes, that one be not higher than another. Now if the face turn downwards, the ſtroak muſt be ſtruck that the eyes may turn answerable with the face downward, when you have done that, make another ſtroak for the length of the Noſe, where the end of the Noſe ſhould come, and another ſtroak for the Mouth, that it be not made crooked, ſtill obſerving to make all the ſtroaks turn one way, either up or down, according as the face turns, for if the face turn up or down, the Eyes, Noſe, and Mouth muſt turn with it, when you have made theſe ſtroaks rightly, proceed to the placing of the features, as in the Rules before.

There is this threefold equal proportion uſually obſerved in a Face. 1. From the top of the forehead to the eye-brows. 2. From the eye-brows to the bottome of the Noſe. 3. From thence to the bottome of the Chin: but this proportion is not conſtant, for ſometimes the forehead is lower than at other times, and ſome mens Noſes longer, others ſhorter, and therefore this Rule is not alwayes to be obſerved, but only in a well proportionate Face. The diſtance between the two eyes is juſt the length of one eye, if it be a full face, but if it turn any thing aſide, then that diſtance is leſſened accordingly; the noſtril ought not to come out further than the corner of the eye in any face, and the mouth muſt be placed alwayes between the eyes and the chin, juſt under the Noſe.

Further Directions about a Face.

BECAUſE the greateſt difficulty, and principal part of this Art lyes in the lively drawing of a Face. I thought good to adde theſe further directions to make you the more perfect in the drawing of it.

1. If you would rightly draw a Face, that it may reſemble the pattern you draw it from; you muſt in the firſt place take notice of the Viſiognomy or Circumference of a Face, whether it be long or round, fat, or lean, big, or little, that ſo you may be ſure in the firſt place to draw the right viſiognomy, or bigness of the Face, which if it be a fat face you ſhall perceive the cheeks to make the ſide of the Face to ſwell out, and ſo make the Face look as if it were ſquare; if a lean face the jaw bones will ſtick out, and the cheeks fall in, and the face will look long and ſlender; if it be neither too fat nor too lean, the face will be round for the moſt part.

When you draw the utmoſt Circumference of a face, you muſt take in the head and all with it, otherwiſe you may be deceived in drawing the true bigness of a face.

2. You muſt diligently, and judiciously diſcern and obſerve all the Maſter touches which give life to a face, and diſcovers the graces or diſpoſition of the mind, (wherein lyes the whole grace of the work, and the credit of the workman) as you ſhall diſcern a ſmiling countenance moſt eaſily in the mouth, when the corners of the mouth turn up a little: a frowning countenance is eaſieſt diſcerned in the forehead, eye-brows bending, and ſomewhat wrinkling about the top of the Noſe between

tween



tween the two eye-brows ; a stay'd and sober stay'd countenance, is best discerned in the eye, when the upper eye-lid comes somewhat over the ball of the eye ; a laughing countenance is easily discerned all over the face, and so is an angry wrathful countenance, by extraordinary frownings ; also there are some touches about the eyes and mouth which gives life and spirit to a face, which you must diligently observe, and you shall by little and little find out, in good Masters works which you should chiefly desire to imitate, and not botchers.

General Rules for the practice of drawing.

1. **H**AVING your Charcoal neatly sharpened, you must at the first in drawing of a face lightly draw the out-stroke, or circumference of the face just according to the bignesse of your pattern, making it to stand fore-right, or to turn upwards or downwards according to your pattern, then make some little touches where the features, as the Eyes, Nose, Mouth, Chin, should be placed, not drawing them exactly at the first, and having thus exactly pointed out the places where the features should be, begin to draw them more exactly, and so proceed, till the face be finished, and then make the hair, beard, and other things about it ? In making of a side face you need not at first exactly draw the Nose, Mouth and Chin, that stand in the out-most line, but only make it at first but a bare circumference, turning this way, or that way, according as the pattern doth, and then make the Mouth, Nose and Chin to come out afterwards, in the right places and just proportion.

2. The Circles, Squares and Triangles that are made in the Print, about the face, are to guide your apprehensions the more readily to the framing of one, that being as it were led by a line, you may the more easily know whereabouts to place the features, as Eyes, Nose, Mouth, &c. which when you are able to do without them, these are of no use at all, but only to guide you at the first to the placing of them.

3. In the third place you must be sure to place the musles in their right and proper places ; by the musles I mean all the shadows that are caused by some dents, or swellings in the face, and be able to find out the reason of every musle, that so you may proceed to work with the more judgment ; you shall perceive the musles most in an old and withered face, and you must first draw the principal of them, and then you may the more easily draw the lesser within ; you must be very exact in the right placing of them, or else you spoyle your draught be it never so good.

4. Observe to make the shadows rightly, and be sure not to make them too dark, where they should be faint, for if you do you can never recover it to make it light again, and so the whole face will be mar'd, and appear unhandsome ; the shadows are generally fainter and lighter in a fair face than in a swarthy complexion : when you have finisht your draft, you will do very well to give here and there some hard touches with your Pen where the shadows are darkest, which will adde a great life and grace to your drawing.

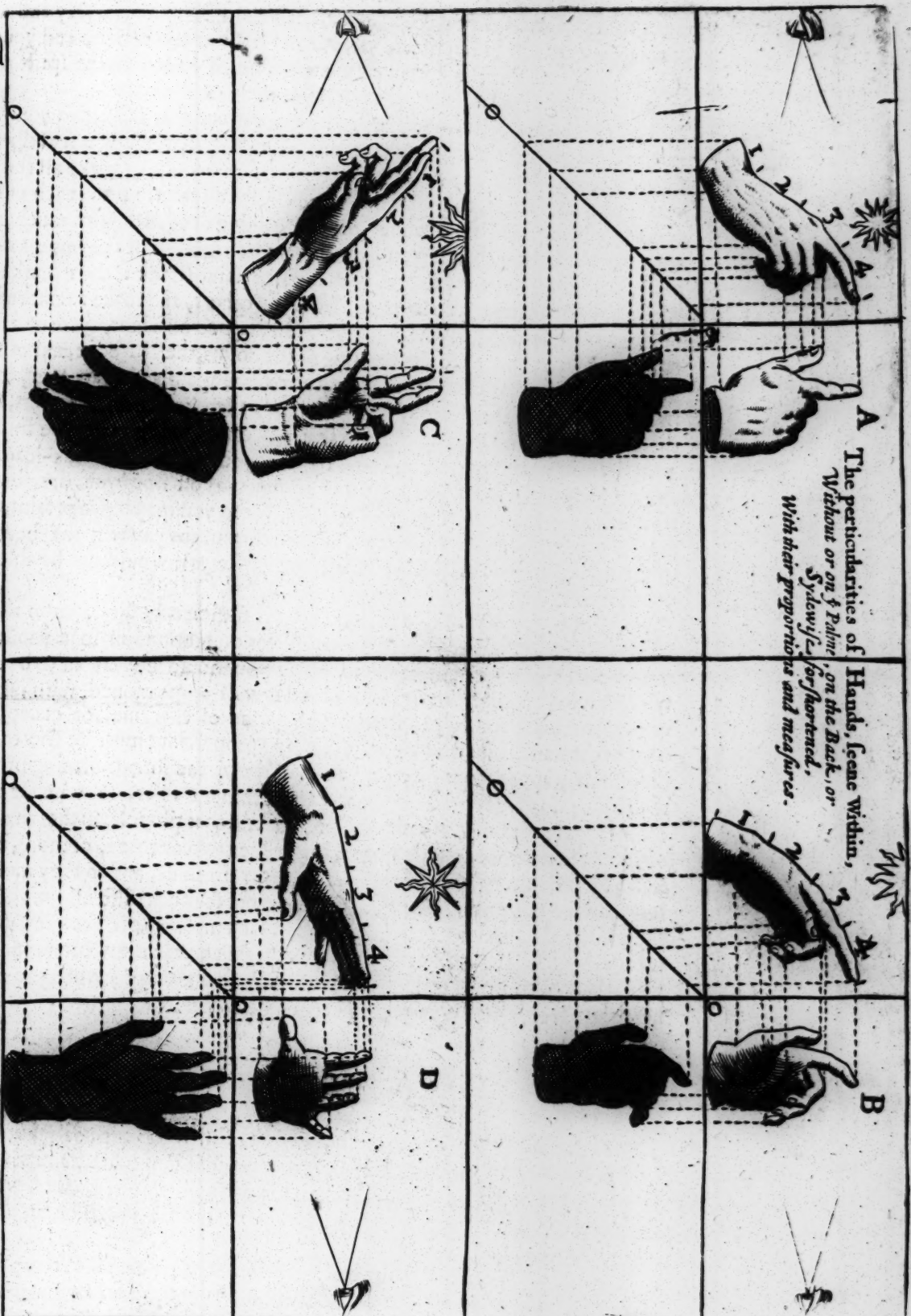
When you have finisht the face, then come to the ears and hair, wherein you must observe this rule, having drawn the out-line of it, you must first draw the principal curls, or master-strokes in the hair, which will guide you with ease to do the lesser curls which have their dependance on them ; always make your curl to bend, and turn exactly according to the pattern, that they may lye loose and fast, and not look as if they were stiffe, stubborn and unplyable : When you have drawn the curls rightly, you must in the last place strike in the loose hairs which hang carelessly out of the curls.

When you can draw a face (which is the principal thing in the Art) then go to hands and armes, legs and feet, and so to full bodies of men and women, which are the most difficult things, which if you can attain to perform, with a well grounded celerity, nothing will be difficult to you, but will be most easie, as flowers, birds, beasts, ships, or any other thing that is to be drawn by hand.

Of drawing Hands and Feet.

BUT to come particularly to hands and feet, which you ought to spend some time about, before you come to the whole bodies, because they will be too difficult for you to enter upon till you have pretty well practised your hand in the drawing

A The pericularities of Hands, seene Within,
Without or on & Palme, on the Back, or
Sydwisye, forshortend,
With their proportions and measures.



To forebitten the Hand, you must draw the perpendicular lines from the Head, seene sydwisye or as he marked with their proportions and measures 1. 2. 3. 4. upon which the Hand being would be cast them downe onto the Dagonall marked as the end with O and then carry the reflexion of them lively from the intersections of these perpendicular lines in the Dagonall above said until you come under the place of the forshortend Hands thereby to get the shadowe from which shadowe you may perpendicularly raigne perpendicular lines until then may meete or intersect level lines above also from the first hand seene aside so will the intersections of the said level named level lines and raigne perpendiculars give the forshortend Hands A B C D E. Even as the Eye would see the sydwisye or sloping Hands; so shall the workman see the Hand forshortend by means of the said shadowe.

of other things, more especially hands and feet, which are the most difficult members of the body to draw, next the face; by learning of which you will the more easily attain the rest, with lesse difficulty and greater perfection, and it is for certain a thing of most singular commendation and estimation, lively and exactly to draw a hand, which hath so many varieties of posture and action, and you will find it a very difficult thing to imitate it in every one of them, in the spirit and life of them, without some lameness or imperfection.

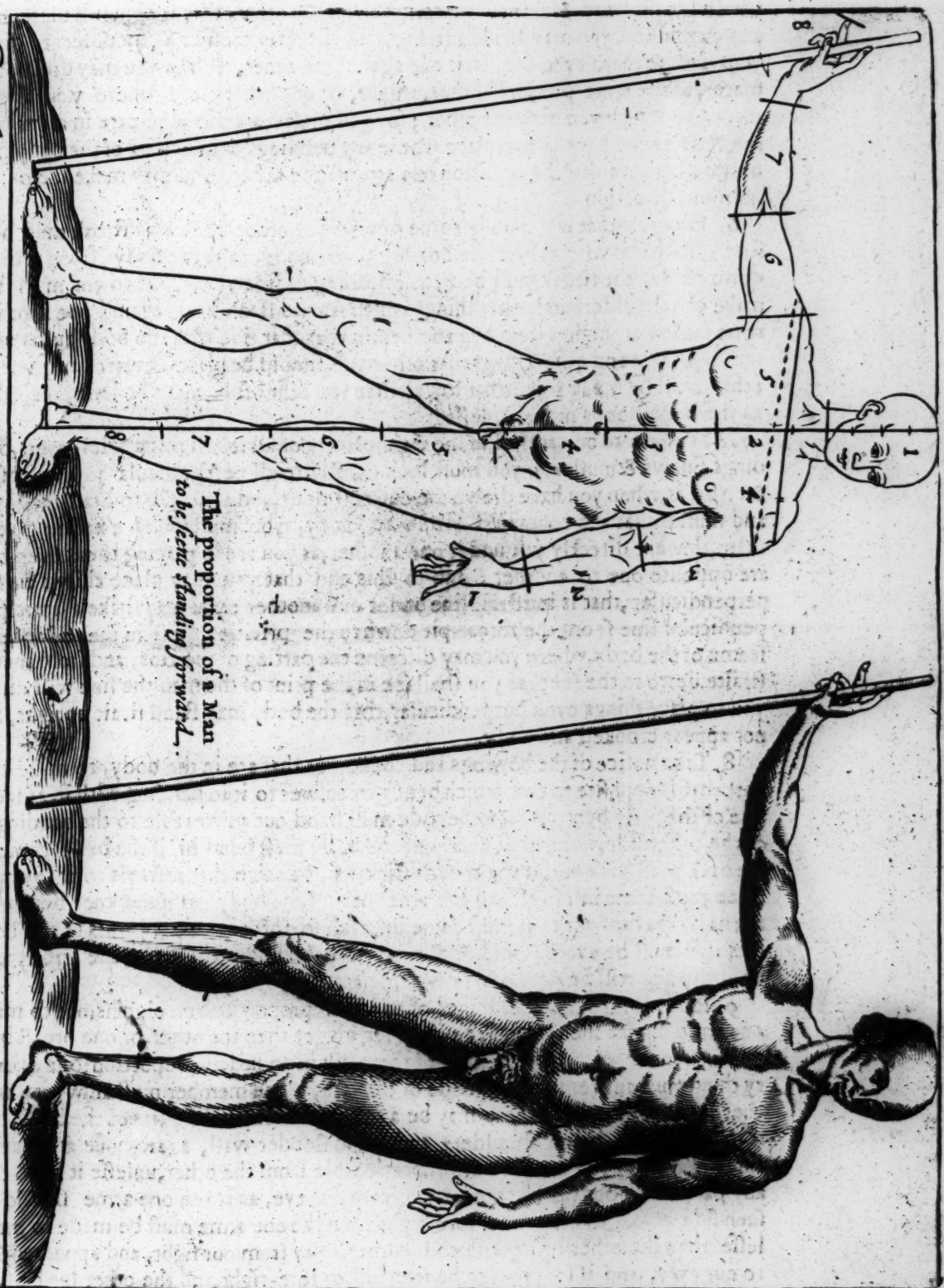
The actions and postures of the hand are so various, that I can give you no certain rule for drawing of them, only take this for a general, when you first draw it with Charcoal, you must not draw it exactly, that is to say, to make all the joynts or veins, or other things, to appear but only lightly and faintly; to touch out the bigness of the hand, and the manner of the turning of it with faint touches, and not with hard stroaks; then if you have done that right, part the fingers asunder, or close, according to your pattern, with the like faint stroak: then mark that place where any of the fingers do stand out from the others, and make a faint resemblance of it; having so done, if you perceive your draft to be right, proceed to draw it more perfectly, and make the bending of the joints, the wrist-bone, and other principal things somewhat exactly. And lastly go over it again, and draw every small bending, or swelling of the fingers, and make the nails, knuckles, and veins, so many of them as appear, and every thing else that you can discern. Observe this rule in all your drawings, that before you come to draw your draft with Black-lead, or other thing, you must blow off the loose dust of the coal off from your drawing, or faintly to whisk over your drawing with a feather, that so you may leave it faint, so that you must but just perceive your stroaks, and by this means you will the better see how to draw it again with your Black-lead, otherwise you would not be able to discern your stroaks.

For the proportions of a hand, you have it sufficiently set down in the Print, by lines and figures, which shews the equalities of proportion in a hand, and how many equal measures there are in it, which you should endeavour to be acquainted with, that so you might know when a hand is well proportioned, with just and equal distances; but I would you should take notice of this rule, or exception, according as the hand turns one way or other, the proportions must be shortened, according as they appear to the eye, as you shall see in the fore-shorning of the hand in the Print; so much as the hand turns away from our sight, so much it looses of its ordinary proportion, & is made to shorten unto that proportion that the eye judges of it, nay sometimes a whole finger, sometimes two or three, or more, is lost to our sight, by the turning of the hand another way from us, and so they must be wholly left out, and not made. For Feet there is not so much difficulty in the making of them as hands; and in drawing of them, you must proceed to the same way that was shewed for the making of hands. When you can draw hands and feet pretty well, then go to armes and legs, wherein is little difficulty; when you can draw the hands and feet, afterwards proceed to whole bodies.

Of drawing the whole body rules to be observed.

1. **I**N all your drawings you must draw it at first with your coal, but very lightly and faintly, for then you may the easier mend it if you draw amiss.
2. In the drawing of a body, you must begin with the head, and be sure to give a just proportion and bignesse to that, because all the body must be proportioned according to the head.
3. At the first drawing of the body with your coal, you must draw nothing perfect or exact, before you see that the whole draft is good, and then you may finish one thing after another as curiously as you can.
4. In drawing a body first draw the head, then the shoulders in their exact breadth, then draw the trunck of the body, beginning at the arm-pits (leaving the arms till afterwards) and so draw down to the hips on both sides, and be sure you observe the exact breadth of the waist: when you have thus done, draw first that leg that the body stands upon, and afterwards that leg that stands loose, or from the body,

and



The proportion of a Man
to be scene standing forward.

In this figure is to be observed that from the top of the head to the sole of the feet is 8 measures of the head and the head 4 lengths of the nose, the which measures are divided upon a perpendicular line with 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 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and last of all draw the armes, and then the hands, either joyned to the body or separated from the body, according to your patterne.

5. In your drawing be sure you place the paralel joynts, sinews and musles, directly opposite in a strait even line one against the other, as the sholders, the arm-pits, the waist, the hips, the knees, and so every thing else, that one may not be higher or lower then the other, that the body may not seem crooked or deformed, but every paralel joynt bend, &c. may directly answer the other, that is opposite thereunto, and to this end you may strike a strait stroak directly crosse the sholders to direct you to place them even and strait one against the other, so also you may do in other places, as the arme-pits, waist, hips, thighs, or any other place; where you should place one thing even with the other; for you must have the same care in all parts of the body, as you have in one place where any bendings or members of the body have or do require a direct opposition one against the other, you may make use of this help and direction.

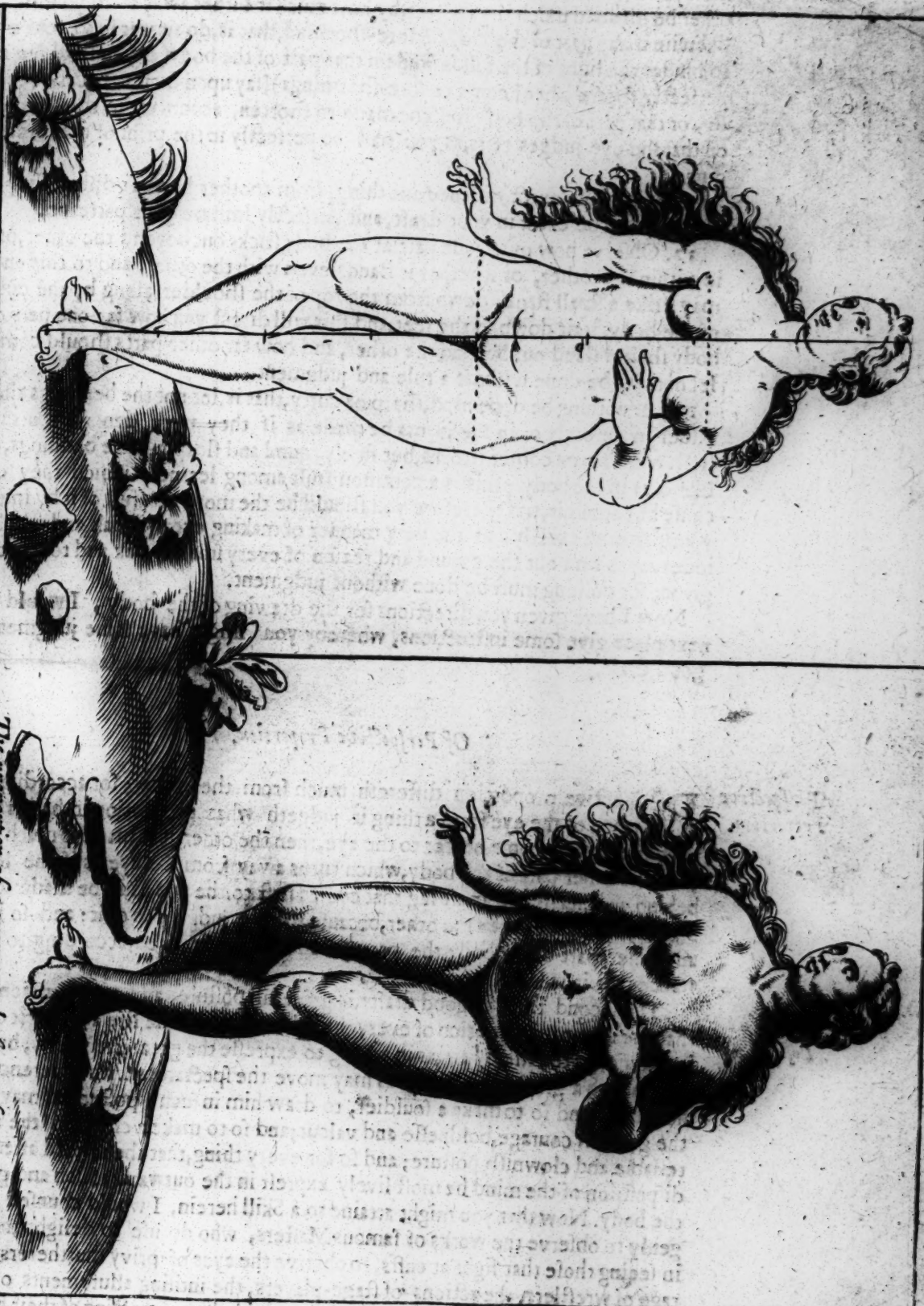
6. Observe that if the body turne one way or other, then this stroak must be so struck, so that it may answer the bowing of the body, as if the body stoop a little down wards, the stroak must be struck sloaping or sideways, and so you must then make the sholders and other things which should stand strait against one another, to be somewhat higher then one another, so that that side that the body turns upon the sholders and other things that otherwise should be placed even one against the other, must be made somewhat lower then the other side, more or lesse, according as the body stoops more or lesse.

7. As you are to be carefull in the right placing of all levell or paralel joynts, bendings, sinews & musles, so you must look exactly to all perpendicular joynts, musles, &c. that is, when you have drawn the outmost draft, and are come to draw the joynts and musles that are contained within the body, you must be as exact in placing them, that are directly just under one another, as you are in placing them even, that are opposite one to another: and to this end that you may place things exactly perpendicular, that is in a strait line under one another: you may strike a strait perpendicular line from the throat-pit down to the privities, just in the middle or seame of the body, where you may discerne the parting of the ribs, and from thence strait down to the feet, as you shall see in the print of the man, the line will direct you to place things even perpendicular, that the body may stand strait upright, and not appear crooked and awry.

8. Take notice of the bowings and bendings that are in the body, to make that part that is opposite to that which bends to answer to it in bending with it, as if one side of the body bent, in the other side must stand out answerable to the bending in of the other side, if the back bend out the belly must bend in, if the belly come in the back must stick out, if the breech stick out, the thigh that answers to it in opposition must come in: so also, in any other part of the body; as if the knee bend out, the hams that answer to it must come in, and so for any other joynts in the body this rule must be exactly observed, otherwise the body will be made grossly and absurdly and will be very gowty without any proportion.

9. Indevour to make all things of an equall proportion and bignesse, not to make one arme bigger then the other, or one leg bigger then the other, or one breast bigger then the other, or any one part of the body in an unjust proportion; but as every thing must answer to the bignesse of the face, so one member must answer to another in bignesse, that so there may be a sweet harmony in the parts of the body, that it may not have broad sholders and a thin slender waist, a raw-bone arme and a thick gowty leg, or any part disproportionable from the other, unlesse it be so that any part of the body doth turne awry from our eye, as if the one arme should be seen side-ways, and the other fore-right, then the one arme must be made so much lesse then the other by how much it turnes away from our sight, and appears lesse to our eyes, and if so one leg be seen full or fore-right, and the other leg be seen side-ways then it must be made so much lesse then the other, by how much it turns away from our sight.

10. As you must observe a just proportion in the bignesse of your draft, so also in the length, that one thing may not be too long for the other, the body may not be too long for the legs, nor the legs too short for the body, nor one leg longer then the other, or one arm longer then the other, but every thing may have his just



The proportion of a woman to be scene afore.

The Proportion & measure of a woman to be scene afore, is like the man, excepting that the measure of the breadth between the shoulders of the woman contains but 2 lengths of the face, as appears by the prickd line withwar the breasts and from the Hips to the Buttocks, 2 lengths of the head, marked with an other cryse prickd line; which maketh the difference between the man & the woman and you must make the Armes Thighes & Legges fatter and plumper then the mans, even to the wrists & ancles. Also you must not make the muscles as of the man.

both for bignesse and length, unless it be so the body shortens awry in a proportion from your sight, as if one leg stand behind another, it must be made so much shorter then the other, according to that distance that it is removed from your eye, and so, if one arme remove it self any whit from your sight that comes first to the eye, and stands nearest to the sight, must be made longer then the other, & the other be made so much the shorter, by how much it turnes away from your sight. So likewise if any part of the body be fore-shortned, that is, do appear so to your eye, as to hinder the light of the full latitude of that part of the body (as you shall see more perfectly shown when I come to fore-shortnings) I say upon such an occasion the body, or that part of the body must be made to shorten, according to that proportion that the eye judges of it, as you shall see perfectly in the print of the fore-shortnings.

11. Observe the exact distance one thing from another how far distant they are, that you may be exact in your draft, and perfectly imitate your patterne.

12. Observe how much one part of the body sticks out beyond the other, or falls in within the other, or whether it stands even with the other, and to this end you may strike a small stroak down from the top of the shoulder along by the out-side of the body strait down to the feet; and this will direct you how far one part of the body should stand out beyond the other, and how far other parts should come in; let nothing be done without a rule and judgment.

13. Let nothing be done hard, sharp or cutty, that is, let not the bendings that are either in the body or in the joynts be made as if they were dents or cuts in the flesh with sharpe corner stroaks, but finely round and sloaping, like bendings, & not like cuts in the body; this is a common fault among learners which they cannot chuse but commit, and therefore you should be the more carefull of it by imitating your patterne exactly, in the very manner of making every stroak and touch, and indeavor to find out the ground and reason of every small stroak and touch that is given, for nothing must be done without judgment.

Now I have given you directions for the drawing of the body, I would in the next place give some instructions, whereby you might have some judgment in a good draft.

Of Perspective Proportion.

*Perspective
Proportion.*

Perspective proportion differeth much from the former, for according to the distance of the eye from a thing it judgeth what proportion it hath, as if one part of the body come nearer to the eye, then the other, it is made so much bigger then the other part of the body, which turns away from the eye, as if one leg stand behind another; the formost leg that comes first to the eye must be made somewhat bigger, and longer then the other, because the eye judgeth so of it; and so it is for any other part of the body, the proportion must be lessened, according to the distance that it is from the eye.

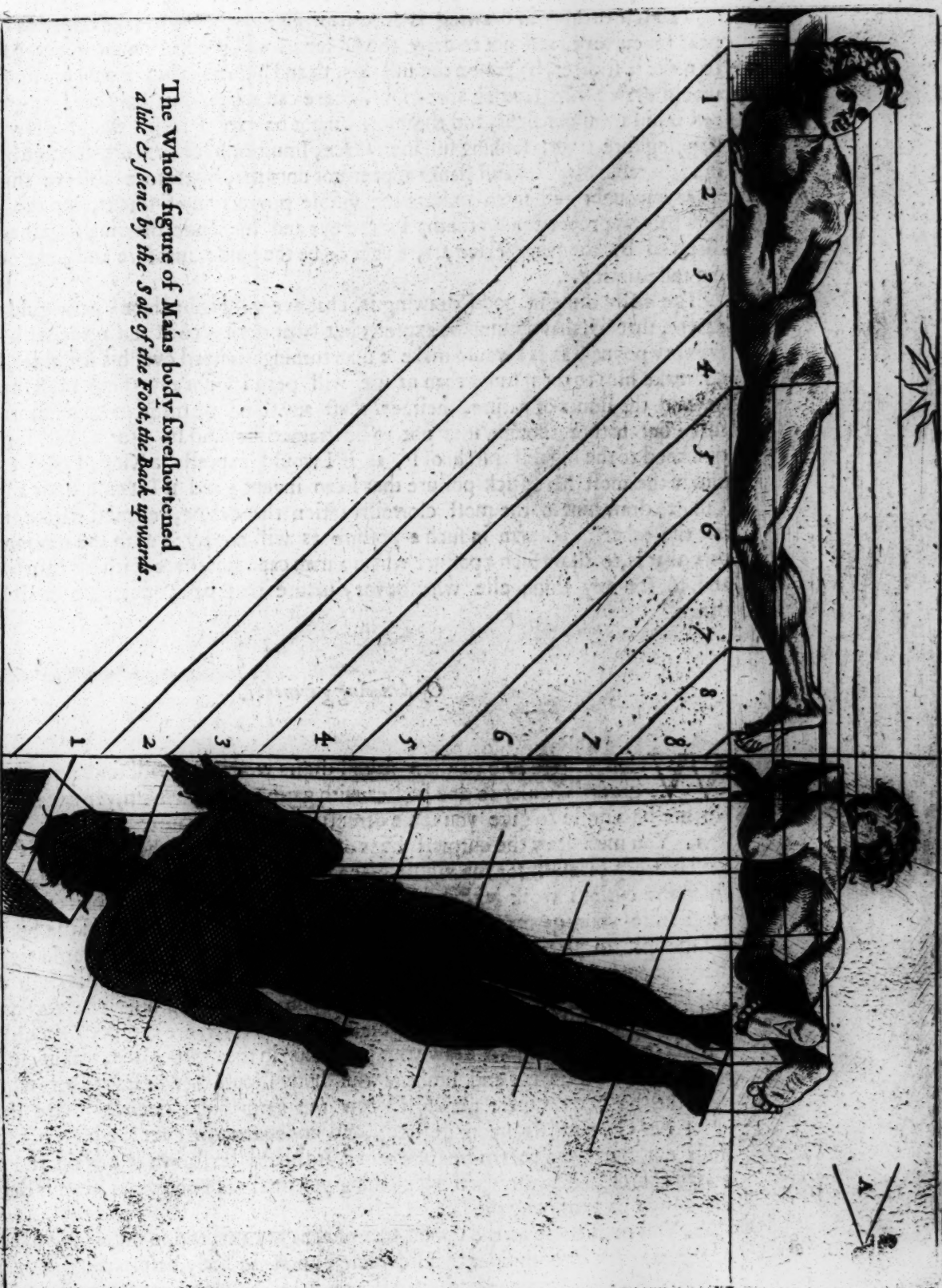
*Graceful
Posture.*

The second thing in good drafts, is gracefull posture, and proper action, that is, that the true natural motion of every thing be exprest in the life and spirit of it, that is to quicken the life by art, as in a King to expresse the greatest majesty, by putting him in such a graceful posture, as may move the spectators with reverence to behold him; and so to make a souldier, to draw him in such a posture, as may betoken the greatest courage, boldnesse and valour; and so to make a clown in the most detestable and clownish posture; and so for every thing, that the inward affection and disposition of the mind be most lively exprest in the outward action and gesture of the body. Now that you might attaine to a Skill herein, I would counsell you diligently to observe the works of famous Masters, who do use to delight themselves in seeing those that fight at cuffs, to observe the eyes of privy murderers, the courage of wrestlers, the actions of stage-players, the inticing allurements of Courtesanes, and those who are led to execution, to mark the contracting of their brows, the motions of their eyes, and the carriage of their whole body, to the end they might expresse them to the life in their drawings and works.

Loosnesse.

The third thing in good drafts, is loosnesse, that is, that the body be not made

stiffe



The Whole figure of Mans body foreshortened
a little & scene by the Sole of the Foot, the Back upwards.

Having made the figure stretched at length by the Side the back upwards You must also observe the measures as appeareth in the level line 1.2.3.4.5.6.7.8. and find up the said measures and proportions by the Diagonall lines upon the perpendicular which separateth the foreshortened figure and the shadow of the afore said figure some aside. Then to make the figure of the shadow, you must draw a line slopewise in the middle of the figure & therein fix your proportion to measure marked 1.2.3.4.5.6.7.8. The first mark 1. for the head the second 2. for the shoulders and so consequently of the rest unto 8. eight measures. And to make the shadow as if it were painted directly upon the back. And to make the drawing you must have perpendicular lines, proceeding from the figure stretched at length, & scene a side by the corresponding intersections, which and off level lines the foreshortened lines and parts of the same scene by the Sole of the feet, the back upwards is described as appeareth in the diagram drawn of this present figure.

stiff in any part, but that every joynt may have its proper and natural bending, so as it may with greatest life expresse your intention, that the figure may not seem lame, and the joynts stiff, as if they were not plyable or capable of bending, but every joynt and limb may have its proper and natural moisture, according as it may best suit with, and become the posture in which the figure is set.

The fourth thing in drawing is fore-shortning, which is to take things as they appear to our eye, and not to draw the full length and proportion of every part, but to make it shorter, by reason the full length and bigness is hid from our sight; as if I would draw a ship standing fore-right, there can appear but only her fore-part, the rest is hid from our sight, and therefore cannot be exprest; as if I would draw a horse standing fore-right, looking full in my face, I must of necessity fore-shorten him behind, because his sides and flanks appear not unto me, wherefore observe this rule; That you ought rather to imitate the visible proportion of things, then the proper and natural proportion of them, for the eye and the understanding together being directed by the perspective art, ought to be the guide, measure and judg of drawing and painting.

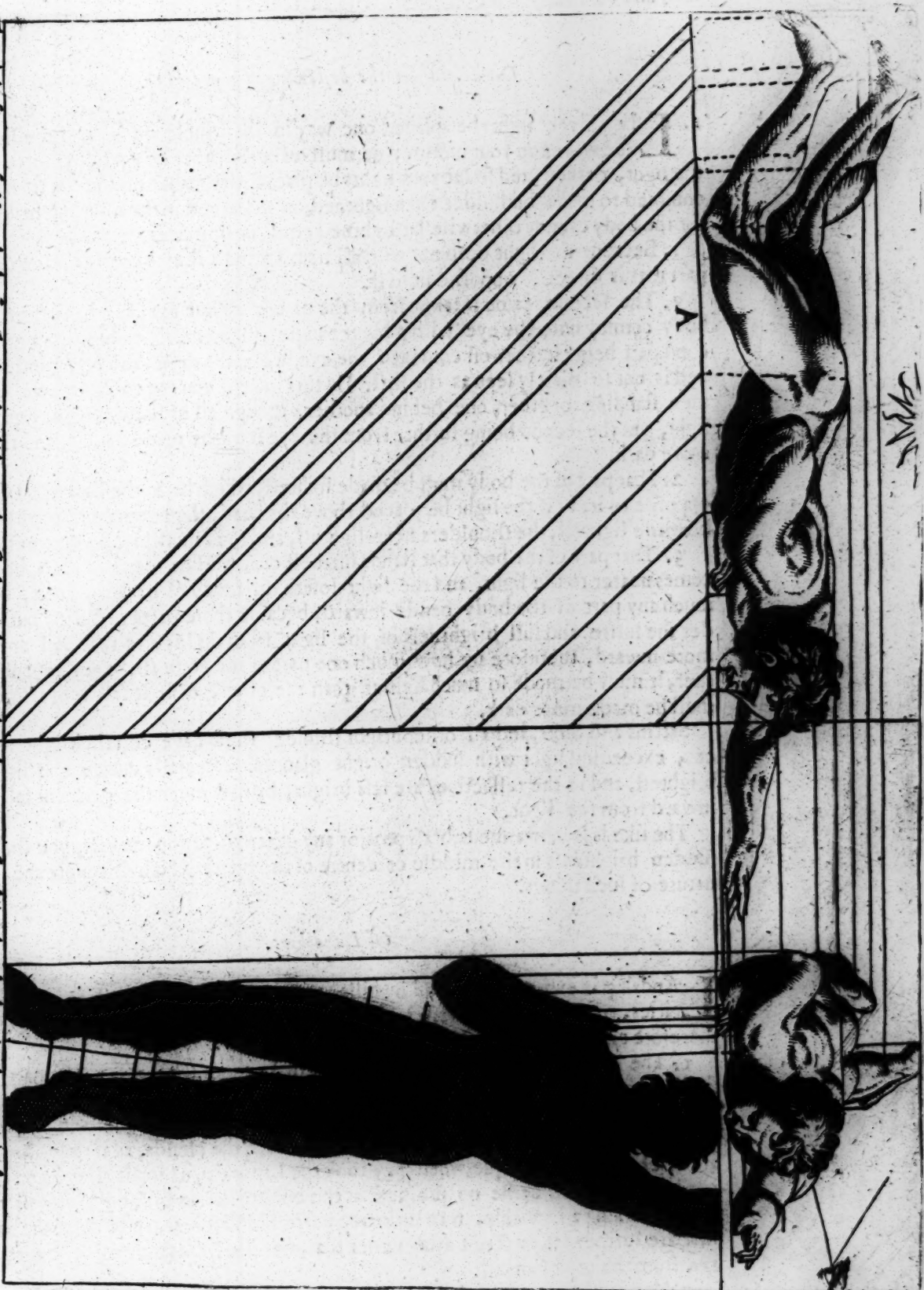
The fifth thing in good drawing is, That every thing be done by the guidance of nature, that is, that nothing be exprest, but what doth accord and agree with nature in every poynt; as if I would make a man turning his head over his shoulder, I must not make him to turn more than nature will permit, nor any thing must be forc'd beyond the limits of nature, neither must any thing be made to come short of nature; but nature though it is not to be strained beyond its centre, yet it must be quickned to the highest pitch of it, as if I would expresse a King, I must expresse him in the most Majestick posture that I can invent; and if I would draw a Clown, I must draw him in the most clownish action that can be, yet must neither the one nor the other be drawn in such a posture as will not agree with the motion of nature, that is, to draw such a posture which a man cannot imitate with his natural body, and so for any thing else whatsoever, nature must be the patterne of all kind of drafts.

Of drawing garments.

When you are able to draw naked drafts well, you will find a matter of no great difficulty to doe bodies with garments upon them, yet nevertheless it will not be a misse to give you some directions about the same.

1. You must draw the outmost lines of your garments lightly, and in this you must be very carefull, for the whole grace of a picture lyes in the outmost draft, and not in the curious work within. Now that you might performe this exactly, you must suite your garments to the body, and make them bend with the body, and not make them strait there where the body should bend; if you would rightly fit the garments to the body, you must observe which part of the body bends in or out, that the garment may answer to the body, upon the least turning one way or other the garment may turn with it; you must also observe where the body should come if it were naked and there draw your garments in the right place, making it bend, according as the joynts and limbs of the body should bend: Excellent workmen do make the body appear plainly thorow the garments, especially where the garment lies close and flat upon the body, and indeed where ever the body bends in or sticks out in any one part more then other, it should be shown in a plain and visible manner through the garments, which thing you must take notice of in your drawing, either by a pattern, or by the life.

2. You must begin at the upper part of the garment, and so draw down that part of the garment on both sides that lies closest upon the body, before you draw the loose part that flies off from the body, for if you draw the loose part of the garment first, before you have finisht that part that lies next upon the limbs and parts of the body you will be soon out, and be apt to place the body crooked and a wry; and therefore many workmen draw the naked first, and afterwards put on their garments, for by that meanes they can better see to place the garments rightly, so as to hang even upon the body, and by this means you will be sure to place the body strait that it be



The whole figure of Mans body forthortened a lide on the Syde and scene by the top of the head the back the vpiward
 The precedent demonstration shall serue vs in this figure forthortened scene by the top of the head, w^{ch} out alteration of any thing for
 the lynes that mount perpendicularly preceeding from the figure of the shadow vnto the leuell lynes of the first figure
 marked A their interfections doe herein giue our figure forthortened scene by the topp of the Head,

not trooked, by drawing those parts of the garment first, that lie nearest upon the limbs.

3. You must draw the greatest folds first, and so stroak your greater folds into less, and be sure you let one fold crosse another.

Directions for the bestowing of your lights.

1. **L**et all your lights be placed one way in the whole work, as if the light falls side wayes on your picture, you must make the other side which is furthest from the light, darkest, and so let your lights be placed altogether on the one side, and not confused to make both sides alike lightned, as if it stood in the midst of many lights for the body cannot otherwise be lightned equal in all places.

1. Because the light doth not with all its brightness illuminate any more than that part that is directly opposite unto it.

2. The second reason is taken from the nature of our eye, for the first part of the body coming unto the eye with a bigger angle is seen more distinctly; but the second part being further off comes to the eye in a lesser angle, and being lesser lightned is not so plainly seen as the first. By this rule if you are to draw two or three men standing together, one behind another, though all of them receive equally the light, yet the second being further from the eye must be made darker, and the third more dark.

2. That part of the body must be made lightest, which hath the light most directly opposite to it, as if the light be placed above the head, then the top of the head must be made lightest, the shoulders next lightest, and so it must lose by degrees.

3. That part of the body that stands furthest out, must be made lightest, because it comes nearer to the light, and the light loseth so much of its brightness, by how much any part of the body bends inward, because those parts that stick out do hinder the lustre and full brightness of the light from those parts that fall any thing more inward, therefore by how much one part of the body sticks out beyond the other, it must be made so much lighter than the other, or if it fall more inward, it must be made more dark.

Sattins and Silks, and all other bright shining stuffs have certain bright reflections, exceeding light with sudden bright glances, especially where the light falls brightest, and so the reflections are less bright, by how much the garment falls more inward from the light.

The like is seen in armour, brasse pots, or any other glittering mettals, you shall see a sudden brightness in the middle or centre of the light, which discovers the shining nature of such things.

Of Landskips.

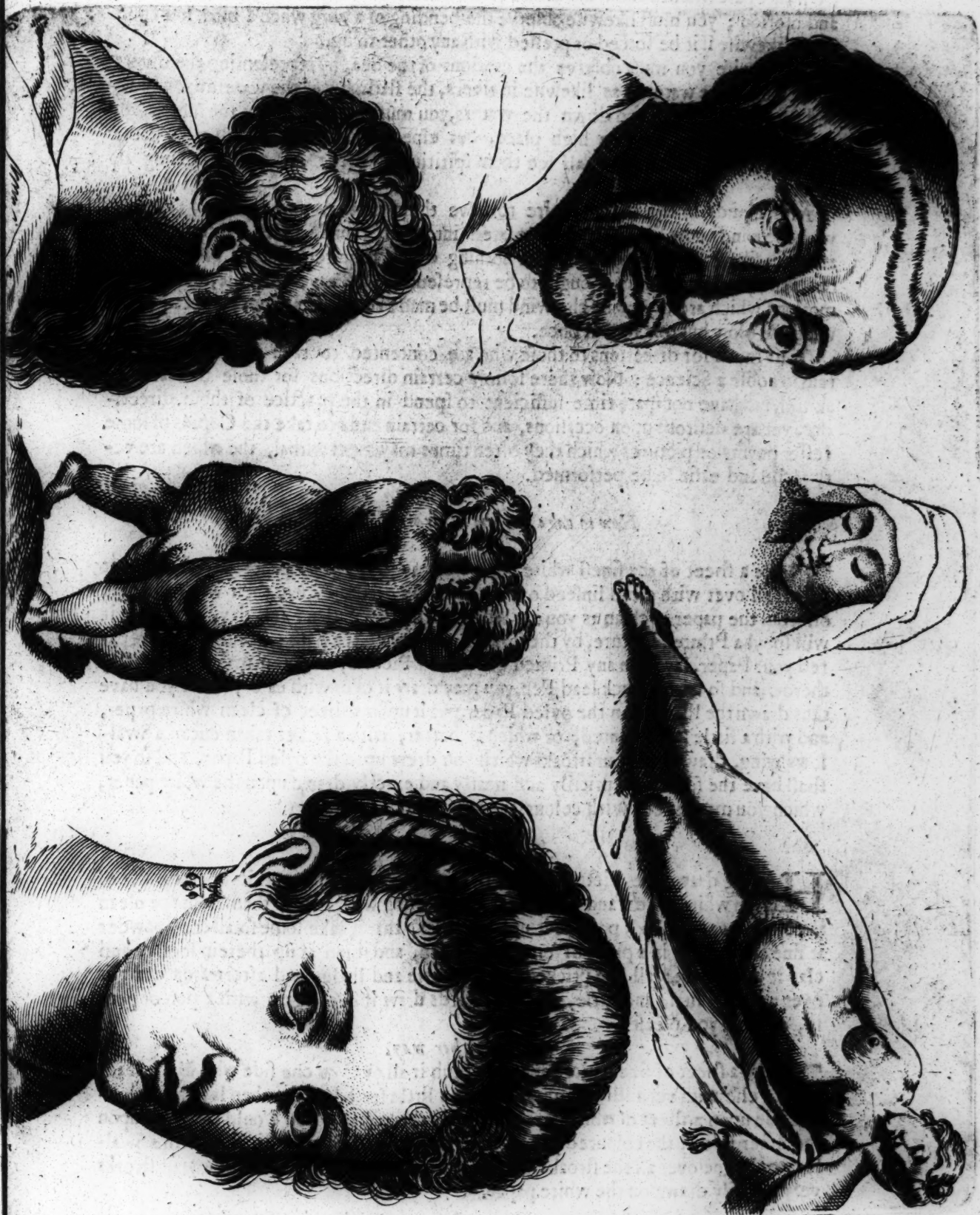
Landskip is expressing of land by hills, woods, castles, seas, vallies, ruins, rocks, cities, towns, &c. and there is not so much difficulty in it, as in drawing figures, therefore take only these rules for it.

1. The best way of making Landskips is to make them shoot away one part lower then another, which hath been practised by our best workmen of late, but others have run into a contrary error, by making the Landskip mount up higher and higher, till it reach up a great height, that it appears to touch the clouds, as if they had stood at the bottome of a steeple, when they took the Landskip, which is altogether improper, for we can discern no prospect at the bottome of an hill, but the most proper way of making a Landskip, is to make the nearest hill highest, and so to make the rest that are further off, to shoot away under that, that the Landskip may appear to be taken from the top of an hill.

2. You must be very careful to lessen every thing proportionable to their distance, expressing them bigger or lesse according to the distance they are from the eye.

3. You must make all your lights fall one way, both upon the ground and trees, and all things else, and all the shadows must be cast one way.

4. You must make every thing to have its proper motion, as Trees when they are shaken



shaken with the wind, their smaller & more pliable boughs must be remembered with such an action, as they may strike one against another, by yeelding and declining from that part whence the wind blows; the stiffer boughes must have less bending and motion; you must likewise observe the bending of a twig when a bird sits upon it, so likewise if it be forced or pressed with any other thing.

So likewise you must observe the motions of the Sea, by representing the divers agitations of the waters, as likewise in rivers, the flashings of the waters upon boats and ships floating up and down the waters, you must also represent the motions of waters falling down from an high place, but especially when they fall upon some rock or stones, where you shall see them spiriting up in the Air and sprinkling all about.

Also clouds in the Air require to have their motions now gathered together with the winds, now violently condensed into hail, thunderbolts, lightning, raine, and such like; finally, you can make nothing which requireth not its proper motions, according unto which it ought to be represented; observe this rule, that all your motions which are caused by the wind must be made to move one way, because the wind can blow but one way at once.

Thus much for directions to those who are contented to take some pains to attain so noble a Science; Now there follow certain directions for those that are unskilful, and have not spare time sufficient to spend in the practice of those directions, yet are desirous upon occasions, and for certain ends to take the Copies of some lesser poynts or pictures which they often times may meet withal, the which are very facile and easie to be performed.

How to take the perfect draft of any Picture.

TAKE a sheet of the finest white Paper you can get, Venice paper is the best, wet it all over with clean linseed oyl on one side of the Paper, then wipe the oyle off from the paper as clean as you can, then let the Paper stand and dry, otherwise it will spoyle a Printed Picture, by the soaking thorow of the oyle; having thus prepared your Paper, lay it on any Printed or Painted Picture, and you may see perfectly thorow, and so with a black lead Pen, you may draw it over with ease; after you have thus drawn the Picture on the oyled Paper, put it upon a sheet of clean white paper, and with a little stick pointed, or which is better, with a fether taken out of a Swallows wing, draw over your stroaks which you drew upon the oyled Paper, and so you shall have the same very prettily and neatly and exactly drawn upon the white paper, which you may set out with colours at your pleasure.

Another way.

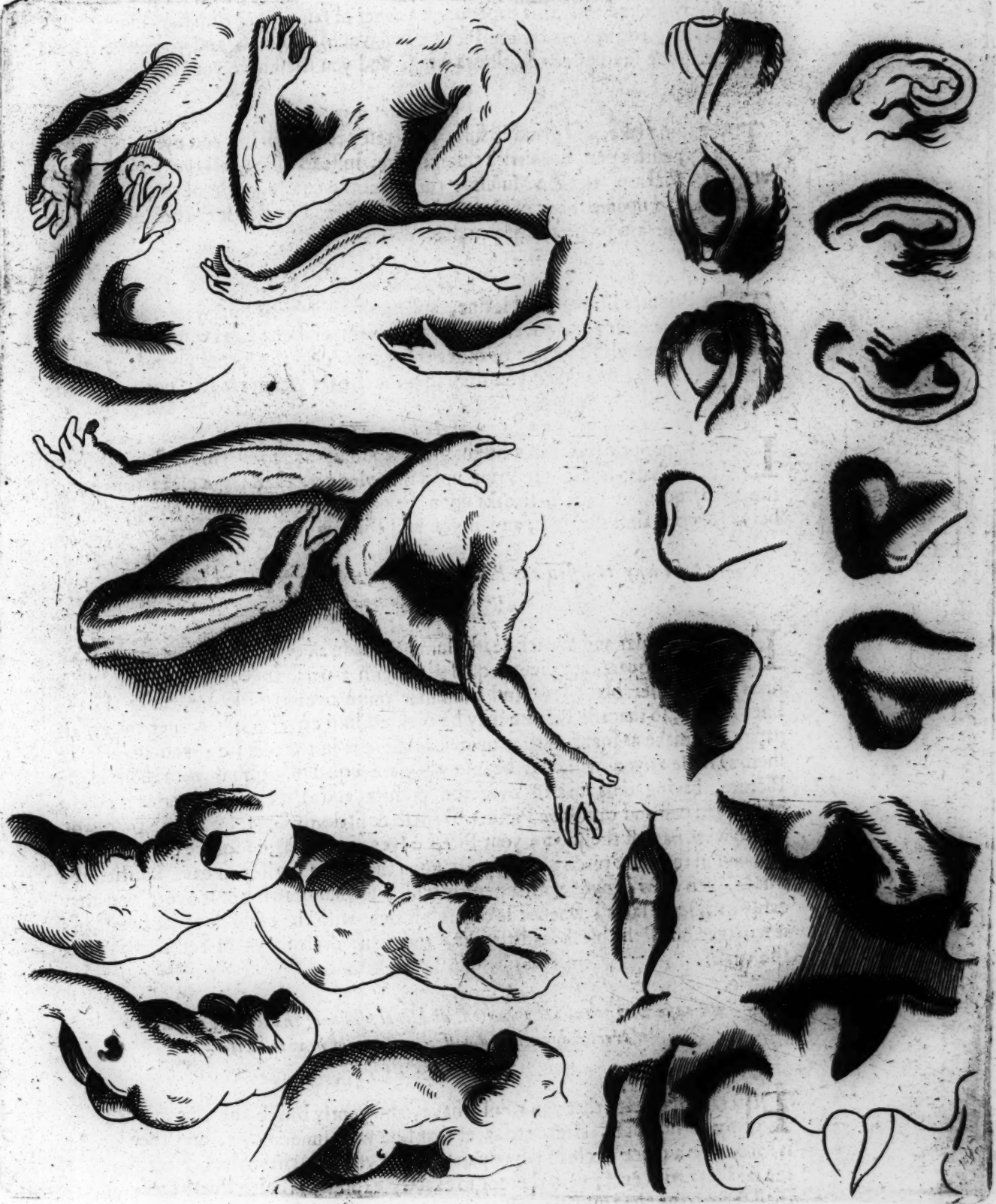
HAVING drawn the Picture, take the oyled paper, and put it upon a sheet of clean white paper, and prick over the drawing with a Pen, then from the clean sheet that was pricked, pownse it upon another, that it take some small coal, powder it fine and wrap it in a piece of some fine linnen, and bind it up therein loosely, and clap it lightly over all the pricked line by little and little, and afterwards draw it over again by little and little, and afterwards draw it over again with a pen or pencil, or what you please.

Another way.

TAKE a sheet of fine white paper, and rub it all over on one side with black-lead, or else with vermillion tempered with a little fresh butter, then lay the coloured side upon a sheet of white paper, then lay the picture you would copy out upon the other side of the coloured paper, and with a small pointed stick, or with a Swallows quill goe over all the stroaks of your picture, and then you shall have your stroaks very prettily drawn on the white paper.

Another way.

TAKE a piece of white Lanthorn horn, and lay it upon your picture, then with a hard nipt pen made with a Ravens quill draw the stroak of your Picture upon the horne, and when it is dry, breath upon the horn twice or thrice, and presse it hard upon a piece of white paper a little wetted, and the picture you drew upon the horn, will stick fast upon the Paper.



Another way.

TAKE a sheet of white paper, rub it all over with fresh butter, and dry it in by the fire; then rub one side of it all over with lamb-black or lake, or any other colour finely ground: lay this paper upon a sheet of fair paper, with the coloured side downwards, and upon it lay the Picture you would copy out, and trace the strokes over with the feather of a Swallows wing, and you shall have your desire.

Another way.

TAKE some lake, and grind it fine, and temper it with Linseed oyle, and afterwards, with a pen, draw with this mixture, instead of ink, all the out-strokes of any paper Picture, also the Muscles, then wet the contrary side of the Picture, and presse it hard upon a sheet of clean white paper, and it will leave behind it all the strokes of the said picture, that you drew over it.

Another way.

TAKE Printers Black, grind it fine, and temper it with fair water, and with a pen tip therein, draw over the master-strokes, and out-lines of the muscles, wet then a fair paper with a sponge, or other thing, and clap the paper upon it, pressing it very hard thereupon, and you shall find the strokes you drew left upon the faire paper.

Another way.

LAY a paper printed upon a bright glass window, or paper window that is oyled with the back-side of the Print upon the window, then lay a clean paper upon the print, and draw the out-strokes upon the paper, which you may visibly see, it being set up against the light, and if you will shadow it finer you may.

An easie way to lessen any Picture, that is, to draw a Picture from another, in a lesser compasse.

FIRST take a ruler and a black-lead plummet made an even square; now, you must divide the square into divers equal parts with a pair of compasses, and draw lines with a ruler black-lead and plummet quite over the Picture, make also the lines acrosse, so that the Picture may be divided into equal squares, then take a fair paper, and make as many squares upon it as there is in the picture; you may make them as little as you will, but be sure they are equal in number with those in the Picture, having thus drawn over the picture and Paper into squares; take a black-lead pen and draw the Picture by little & little, passing from square to square, and in what part of the square your Picture lyes, in that same square put the drawing, and in the same place of the square upon the paper until you have finished the whole, then draw it over with a pen, in which second drawing of it over, you may easily mend any fault; when it is dry, rub it over with the crum of white bread, and it will take off all the black lead strokes, and your draft only will remain fair upon the paper.

An easie way to take the natural and lively shape of the leafe of any hearb or tree, which thing passeth the art of man to imitate with Pen or Pensil.

FIRST take the leafe that you would have, and gently bruise the ribs and veins on the back-side of it, afterwards wet that side with linseed oyle, and then presse it hard upon a piece of clean white paper, & so you shall have the perfect figure of the said leafe with every vein thereof so exactly exprest, as being lively coloured, it shall seem to be the truly natural.

Of washing Maps or Prints.

WASHING Pictures is nothing else but the setting them out with colours, and for the effecting thereof you must be provided with store of pensils, some smal-

let then another, Allum-water, Gum-water, water made of Sope-ashes, Size, varnish, and store of good colours well prepared.

How to make Allum water, and the use of it.

TAKE a quart of fair water, and boyl it in a quarter of a pound of Allum, seeth it until the Allum be dissolved, then let it stand a day, and so make use of it.

With this water you must wet over your pictures that you intend to colour, for it will keep the colours from sinking into the paper, also it will add a lustre unto the colours and make them shew fairer, and it will also make them continue the longer without fading; you must let the paper dry of it self after you have once wetted it, before you either lay on your colours or before you wet it again, for some paper will need to be wet four or five times.

If you intend to varnish your pictures, after you have coloured them you must first size them, that is, rub them over with white starch with a brush, in stead of doing them with Allum-water, but be sure you size it in every place, or else the varnish will sink thorow: Note, if your varnish be too thick you must put into it so much Turpentine oyl as will make it thinner.

How to make Gum-water.

TAKE clean water a pint, and put it into three ounces of the clearest and whitest Gum-Araback, and let it stand untill the Gum be dissolved, and so mix all your colours with it; if the gum-water be very thick it will make the colours shine, but then your colours will not work so easily, therefore the best is, that the water be not made too thick nor too thin.

How to make Lime water.

TAKE unsack'd lime, and cover it with water an inch thick, let it stand so one night, in the morning poure off the clear water and reserve it in a clean thing for use; with this water you must temper your sap-green when you would have a blew colour of it.

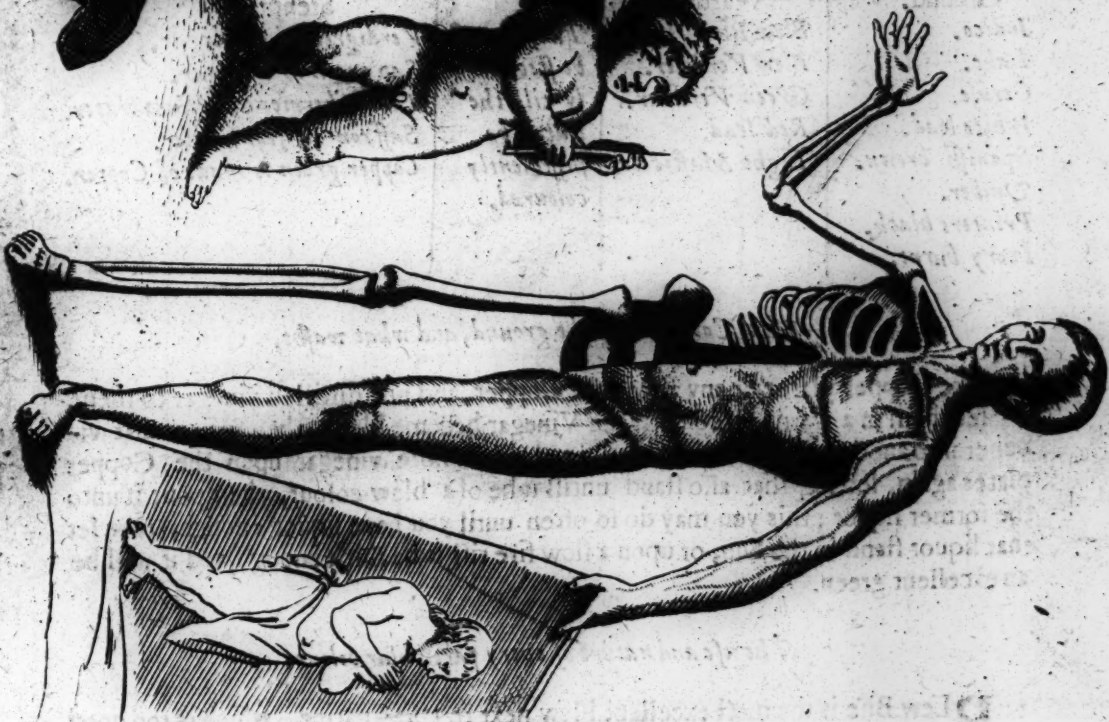
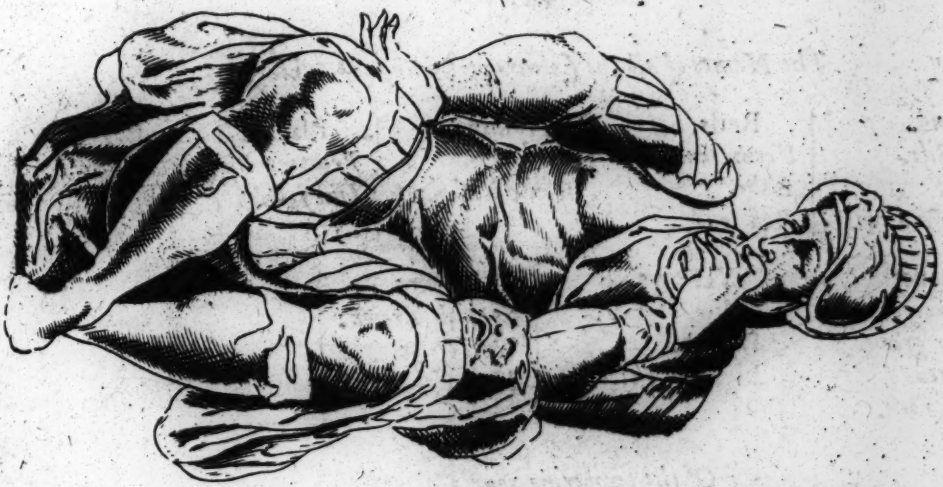
How to make water of Soap-ashes.

STEEP soap ashes a night in rain water. In the morning poure off the clearest. This water is to temper your Brazil withall.

How to make Size.

TAKE a quantity of glew, and let it steep a night in water, to make it the readier to melt in the morning, then set it on a coal of fire to melt, which done, to try whether it be neither too stiff nor too weak, for the meanest is best, take a spoonfull thereof and set it in the air to cool, or fill a musle shell with it, and let it swim in cold water, to cool the sooner; if it be too stiffe when it is cold put more water to it, if too weak then put more glew into it, and when you would use it, make it lukewarme, and so use it.

This is to wet your cloaths in if you intend to past your maps or pictures upon cloath, you may take white starch and wet your sheet, and wring it out, and so strain it upon a frame, or nail it stretched upon a wall or board, and so past your maps or pictures thereon.



The Names of all the Colours pertaining to Washing.

Blews.	Reds.	Whites.	Blacks.
Blew Bise.	Vermilion.	Ceruse.	Printers Black.
Indico.	Lake.	White lead pickt.	Ivory burnt.
Blew Verditer.	Rad lead.		
Greens.	Yellows.	Browns.	
Verdigreece.	Yellow berries.	Spanish Brown.	
Verditer green.	Saffron.	Umber or	
Sap green.	Light Masticot.	Hair Colour.	
Copper green.			

Of the tempering your Colours.

Some colours must be ground, and some washt; such colours as are to be ground you must first grind very fine, in fair water, and so let them stand and dry, and afterwards grind them again in Gum-water.

Those that are to be washt must be thus used.

Take a quantity of the colour you would have washt, and put it into a shell, or earthen dish, then cover it all over with pure fair water, and so stir it up and down for a while together with your hand, or a wooden spoon, till the water be all coloured, then let the colour sink a little to the bottom, and before it be quite settled, pour out the top into another dish, and so fling the bottome away, and let the other stand till it be quite settled, and then pour off the water, and mix it with Gum-water, and so use it.

What Colours must be ground, and what washt.

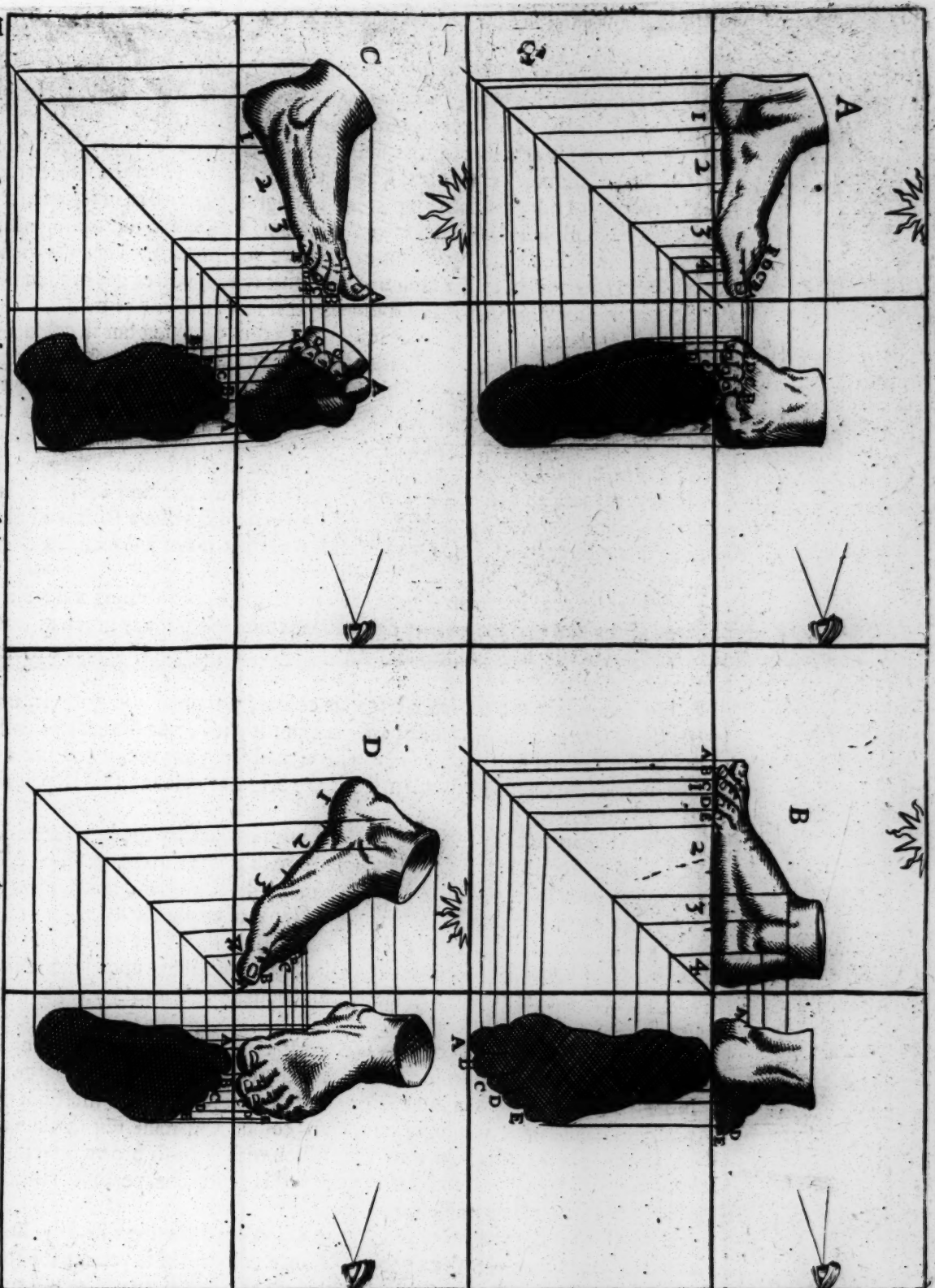
Ground.	Washt.	These must	Steep.
Indico.	Blew Bise.	be steeped only till the water be sufficiently coloured.	Verdigreece in Vinegar.
Lake.	Blew Verditer.		Sap green in Vinegar.
Ceruse.	Green Verditer.		Yellow-berries in Allum water.
White lead.	Red lead.		Saffron in fair water.
Spanish brown.	Light Masticot.		Copper green is made of Copper.
Umber.			
Printers black.			
Ivory burnt.			

What Colours must be ground, and what washt.

Take Copper plates, or any shreds of Copper, and put distilled vinegar to them, set them in a warm place until the Vinegar become blew, then poure that vinegar into another pot, well leaded, and pour more vinegar upon the Copper plates again, letting that also stand untill it be of a blew colour, then pour it unto the former liquor; this you may do so often until you have liquor enough, then let that liquor stand in the Sun, or upon a slow fire till it be thick enough, and it will be an excellent green.

The use and nature of every particular colour.

1. **B**lew Bise is the most excellent blew next to Ultramarine, which is too good to wash withal, and therefore I leave it out here, and put in blew Bise, which will very well serve in the stead of it, and indeed you may leave out both and use Smalc



To fore-shorten feete seen forward, you must make the foote side wth his proportions and measures, seen on the inside of the foote marked A. and from those proportions and measures marked 1, 2, 3, 4. draw downe Perpendiculars until they cut the Diagonal, and convey thence lines Parallel, to make the Shadowed foote under the place of the fore-shortened foote, and from the said shadowed you must raze perpendiculars unto the place of the said foote to be shadowed which there meeting with the said lines that proceede from the first foote by intersections of them there, give us the said foote Geometrically fore-shortened as appear here represented, wherein the toes of the feete are marked A, B, C, D, E, and the hke as to be observed for the foote seen by the heele marked B. and also for the foote marked with C, seen on the fore-part, and lastly in like sort for the foote marked D wth are fore-shortened by the same rules as the former.

Smalt in the stead of them, but that it will not work so well as Bise; no Bise is too good to use upon all occasions, but only when you intend to bestow some cost and paines upon a piece, otherwise you may use no other blew in your work then blew Verditer, with which you may make a pretty good shift without any other blew, I meane in ordinary work.

2. Indico is a dark blew, and is used principally to shadow with upon your other blew, Indico and yellow-berries mixed together make a dark green to shadow other greens within the darkest places.

3. Blew Verditer is a very bright pleasant blew, and the easiest to work with in water: it is somewhat inclining to a green, and being mixed with yellow-berries it makes a good green; This blew is most used.

4. Verdigre is a good green, but subject to decay; when it is dry upon the paper it will be of a lighter colour then it is when you lay it first on, therefore to preserve it from that fault, put some sap green amongst it to dissolve in it, and it will make it keep its colour; this colour is of a poysonous nature, and therefore you must be carefull how you use it, that it come not neare your mouth. There is distilled Verdigre to be bought at the Colour-shops, that is a far better green then the other, but it is somewhat deare, and the other will serve instead of it.

5. Verditer green is a light green, seldome used in any thing but in colouring of Landskips, those places that should shew afar off, and it is good for such a purpose, because it is somewhat inclining to a blew, but you may make a shift to do any thing well enough without it; for a little blew Verditer mixt with Copper green and a little white will make just such another colour.

6. Sap green is a dark dirty green and never used but to shadow other greens in the darkest places, or else to lay upon some dark ground, behind a picture, which requires to be coloured with a dark green, but you may make a shift well enough without this greene, for Indico and Yellow-berries make just such another colour.

7. Copper green is an excellent transparent green, of a shining nature, if it be thickned in the Sun or upon a softly fire, and it is most used of any green in washing of Prints, especially in colouring of the grasse, ground, or trees, for it is a most perfect grasse-green.

8. Vermilion it is the perfectest scarlet colour, you need not grind it, no nor wash it, it is fine enough of it selfe, only temper it with your finger in a gally pot or oyster shell, with gum-water, and it will be ready for your use, if you put a little yellow-berries amongst it, it will make it the brighter colour; this is principally used for garments.

9. Lake it is an excellent Crimson colour, with it you may shadow Vermilion, or your yellow garments in the darkest places; with it you make a Skie colour, being mixed only with white; with it you make flesh colour, sometimes mixed together with white and a little red-lead, it is of an excellent colour it selfe to colour garments, or the like. Indian Lake is the best lake, but too good to be used to wash Prints with, unlesse you intend to bestow great curiosity upon your work; but the best sort of ordinary lake will serve well enough for ordinary uses, but that also will be somewhat costly.

Therefore instead thereof you may use red Ink thickned upon the fire, and it will serve very well for your purpose, and better then lake unlesse it be very good.

Note if you would make a light Skie colour of your red Ink, you must not thicken it, or if you would mix it among your flesh colour you must not thicken it, you should rather chuse to shadow your Vermillion with Spanish brown then thick red Inke, which will serve well for that purpose and is much cheaper, but it is not altogether so bright a colour and clear.

10. Red lead is the nearest to an Orange colour, and putting a little yellow berries into some of it, will make a perfect Orange colour, but if you meane to make flesh colour of it, you must put no yellow, but only then when you would make an Orange colour. This colour is used for the colouring of buildings, or high wayes in Landskip, being mixed with a little white. Also it is the only bright colour to shadow yellow garments with, to make them shew like changeable Taffety; it is good also to colour any light ground in a picture, taking only the thin water of it, and so for severall other uses as you shall see occasion for it.



11. Yellow berries, it is most used in washing of all other colours, it is bright, and transparent, fit for all uses, and is sufficient without the use of any other yellow.

12. Saffron is a deep yellow if you let it stand a pretty while; it is good principally to shadow yellow-berries with, instead of Red-lead: and it is somewhat a brighter shadow, but you may make shift well enough without this colour, for red-lead and yellow-berries make just such another colour.

13. Light Masticote; It is a light yellow, just like yellow-berries and white, and therefore you may shift well enough without it, only for the saving you a labour to mix your yellow berries with white when you have occasion for a light yellow, which you may sometimes make use of to colour a light ground in a Picture, and then shadow it with the water of burnt Umber, or Red-lead, that is the thinnest part of the colour.

14, 15. Ceruse it is the best white, if it be good and finely ground ready to your hand, as you may have it at some Colour-shops, or for want of it buy white-lead pickt to your hand, either of them will serve well enough; any of these being mingled with another colour, they make it lighter, and the more you put, the lighter they will be, as you shall find in the using of them.

16. Spanish-brown is a dirty brown colour, yet of great use, not to colour any garment with, unless it be an old mans gown, but to shadow Vermillion, or to lay upon any dark ground behind a Picture, or to shadow yellow-berries in the darkest places, when you want Lake, or thick red Inke.

17. It is the best and brightest colour when it is burnt in the fire till it be red hot, but if you would colour any hare, horse, dog, or the like, you must not burn it, but for other uses it is best when it is burnt; as to colour any wooden post, bodies of trees, or any thing else of wood, or any dark ground in a Picture; it is not to be used about any garments, unless you would colour many old mens gowns, or caps standing together, because they must not be all of one colour of black, therefore for distinction and varieties sake you may use Umber unburnt for some of them.

18. Printers black is most used, because it is easiest to be had, and serves very well in washing: Note, you must never put any black amongst your colours to make them dark, for it will make them dirty, neither should you shadow any colour with black, unless it be Spanish-brown, when you would colour an old mans gown, that requires to be done of a sad colour; for whatsoever is shadowed with black will look dirtily, and not bright, fair and beautiful.

19. Ivory burnt or want of that bone burnt, it is the blackest black that is, and it is thus made; Take Ivory, or for want of it some white bone, and put it into the fire till it be thoroughly burned, then take it out and let it cool, and so slit it in the middle, and take out the blackest of it in the middle and grind it for your use.

Directions for the mixing of your colours.

IN mixing of any colour, you must be very careful you make it not too sad; if one colour be sadder than the other that you mix with it, put in but a little and a little of the sad colour, till you see it be sad enough for your purpose, for if you make your colour too sad, you will very hardly recover it in mixing, and if you lay it so on your Picture, you can never recover, but if it be too light you may make it darker at your pleasure.

2. In mixing your colours you must be very careful that you put not your Pensils out of one colour into another, for that will spoil and dirty all your colours, unless you wash your Pensils clean and then wipe the water out of them.

3. Black is not to be mingled with any colour but white, for it dirtieth all other colour, and makes them look unpleasant.

4. You should when you mix any colours, stir them about with your Pensil that so you might stir up the colour, and might not take the thin water only to mix, nor yet the bottome only, but the water being well coloured pour it out into a shell, and then stir the other colour in like manner, and so mingle them together; you should



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U.S. Department of Education, Washington, D.C. 20540-0001

should pour out the lightest colour first, that so you might the better know what quantity of the sadder will serve your turn.

Particular Directions for the compounding of Colours, or mingling one Colour with another.

How to make a Purple colour.

Take Logg-wood, and seeth it in Vinegar and small beer, in an earthen pot, and put a little Allum therein, until you tast it to be strong on your tongue, and when it is boiled, strain the Log-wood through a clout, clean from the water, and so let the water stand and cool for your use.

O R

You may make purple colour with mixing Bise and Lake together, or if you want Bise, you may use blew Verditer, but it will not serve your purpose so well as blew Bise, but thick red Ink will serve at all times as well as Lake in washing.

How to make red Ink.

Boil Brazil as you do the Log-wood, and strain the Brazil through a clout as before.

A Flesh colour.

It is made of white and a little Lake, and a little Red-lead mixed, a very small quantity of each; you may make it as light, or as red as you please, by putting more or lesse white in it shadow in the cheeks and other places, by putting in a little more Lake and Red-lead into it, if you would have it a swarthy complexion to distinguish the mans flesh from the womans, put a little yellow Oker among your flesh, & for your shadow put a little more Lake, & a small quantity of burnt Umber.

An Ash-colour is compounded of black and white.

You may make your greens lighter by mingling it well with yellow berries or white.

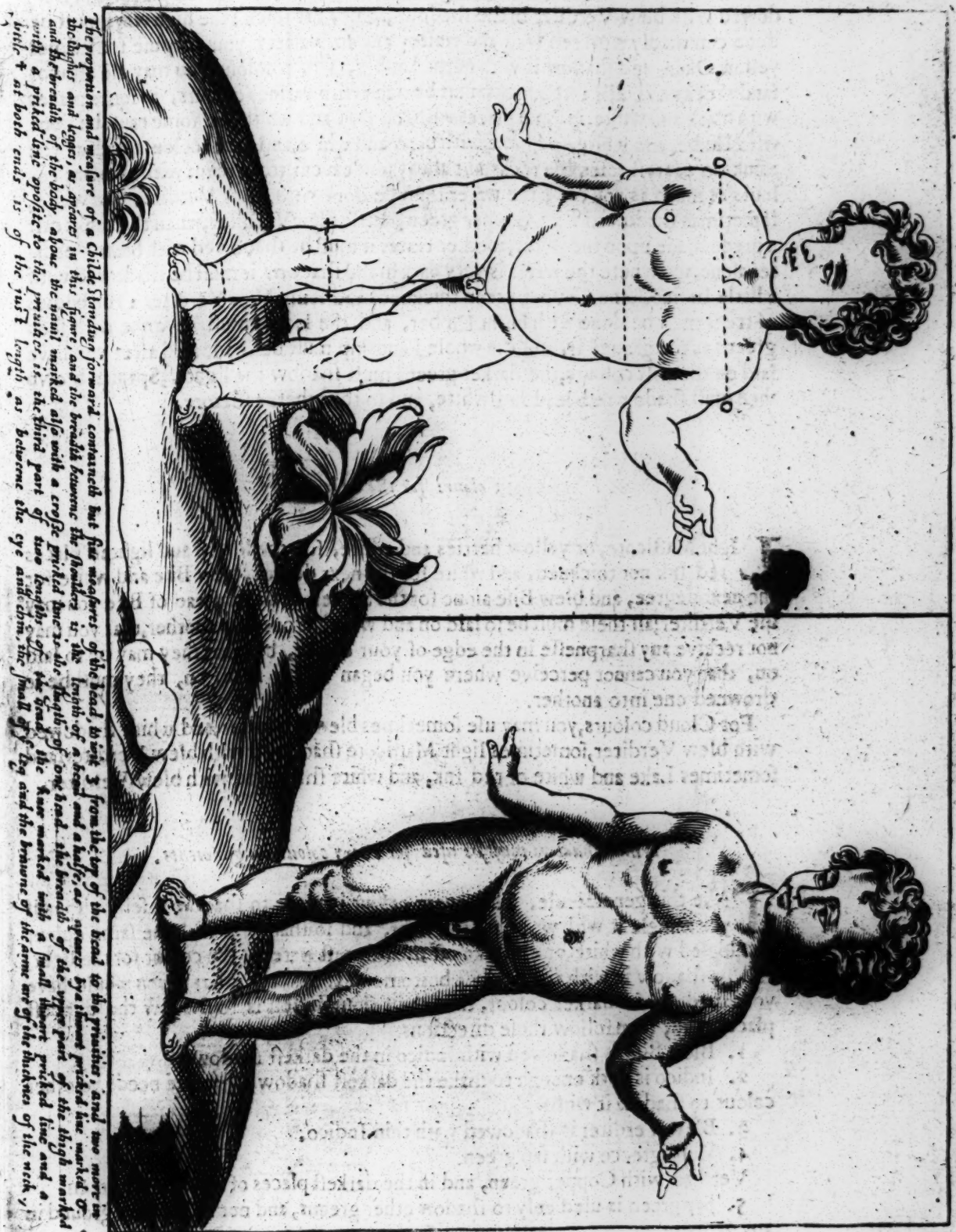
Colours for Buildings.

IN washing we do not observe the natural colours of every thing, as to express variety of colours and pleasantness to the sight, that things coloured may appear beautiful to the eye, yet so as they may not be contrary to reason, and be accounted ridiculous; but that we do somewhat imitate natural things, and here and there adde some beauty by pleasant colours, more than doth usually and commonly appear in the natural things themselves, so that although the natural things themselves do very rarely appear in such beauty or with such kind of colours, yet it may be imagined that it is possible that at some times they do or may be made (without derogating from the rule of nature and reason) to appear in such colours as you have expressed them in, by this rule, you may guide your self in colouring of any thing, and principally in Buildings, and in Landships, therefore when you would colour any Buildings, you must do it with as much variety of pleasant colours as the utmost extent of nature and reason will permit, yet not without reason, or beyond the limits of nature.

In colouring Buildings you may sometimes use black and white for the wall, conduits or other things where you think fit sometimes; you may use red-lead and white for brick houses or others; when many houses stand together you must colour them with as many various colours as you can well use about Buildings; sometimes you may use Umber and white and sometimes Lake and white, or red Ink and white, for varieties sake, and if you want more variety, you may put here and there in some places Verditer and white, all these you must shadow after you have laid them on.

Colours for Landships.

For the nearest and darkest saddest hills lay burnt Umber, and for the light places you some put some yellow to your burnt Umber, for the next hills lay Cop-
I per



The proportion and measure of a child standing forward countenanced but five measures of the head, with 3 from the top of the head to the privities, and two more in the breast and legs, as appears in this figure, and the breadth between the shoulders is the length of a head and a half, as appears by a line marked O. and the breadth of the body above the navel marked also with a cross is the length of the body, the breadth of the upper part of the thigh marked with a cross is the breadth of the privities, the third part of the length of the body is the breadth of the head, the four marked with a small cross is the breadth of the neck, and a little at both ends is of the just length, as between the eye and chin, the small of the leg and the breadth of the arm out of the thickness of the neck.

per green well thickned with the fire, or in the Sun; in the next hills further off, mingle some yellow berries with your Copper green, and let the fourth degree be done with green Verditer, and the furthest faintest places with blew Bise, or for want of that with blew Verditer mingled with white for the lightest places, and shadowed with blew Verditer in the shadows, somewhat thick: the high ways must be done commonly with red lead and white, and for variety you may use sometimes yellow Oker, and shadow it with burnt Umber, which colour you may use also for sandy rocks and hills: the rocks must be done with various colours, in some places with black and white, in some places with red lead and white, and some must be done with Umber and white, and some with blew and white, and other colours, such as you think do nearest resemble rocks, but always endeavour to do them with pleasant colours as much as you can; the water must be done with black Verditer and white, sometimes shadowed with Copper green, a little blew Verditer, when the banks cast a green shade upon the water, at other times it must be shadowed with blew Verditer alone, and where the water is very dark in the shadows, it must be shadowed with a little Indico, some Copper green thickned, and some blew Verditer: the bodies of trees must be done with burnt Umber, and the leaves must be done with such greens as the ground is, and the whole Landskip must be shadowed after you have laid on the first colours, the darker greens must shadow the lighter, Spanish brown then must shadow red-lead and white, and so the others as before.

Colours for the Skies.

Light Masticote, or yellow berries and white, for the lowest and lightest places red Ink not thickned, and white for the next degree, blew Bise and white for the next degree, and blew Bise alone for the highest of all; instead of Bise you may use Verditer; all these must be so laid on and wrought one into another, that you may not receive any sharpnesse in the edge of your colour, but that they may be so laid on, that you cannot perceive where you began to lay them on, they must be so drowned one into another.

For Cloud colours, you may use sometimes blew Verditer, and white shadowed with blew Verditer, sometimes light Masticote shadowed with blew Verditer, and sometimes Lake and white or red Ink, and white shadowed with blew Verditer.

What shadows must be used for every colour in garments.

TAKE this general rule, That every colour is made to shadow it self, either if you mingle it with white for the light, and so shadow it with the same colour unmingled with white, or else take off the thinnest water of the colour for the light, and so shadow it with the thickest bottome of the colour; but if you would have your shadow of a darker colour, then the colour it self is to shadow the deepest places with, then follow these directions.

1. Blew Bise is shadowed with Indico in the darkest shadows.
2. Indico is dark enough to make the darkest shadow, therefore needs no other colour to shadow it withal.
3. Blew Verditer is shadowed with thin Indico.
4. Verdigrisee with sap green.
- Verditer with Copper green, and in the darkest places of all with sap green.
5. Sap green is used only to shadow other greens, and not to lay for a ground in any garment.
6. Copper green is shadowed either with sap green or Indico and yellow berries.
7. Vermillion with Lake, or thick red Ink, or Spanish brown.
8. Lake must not be shadowed with any colour, for it is the darkest red of it self, but for variety you may shadow it sometimes with Bise, or blew Verditer, which makes it shew like a changeable Taffety.
9. Red lead is shadowed with Spanish brown in the darkest places:
10. Yellow berries, the natural shadow for it is Umber, but for beauties sake it is

Seldome



seldome shadowed with Umber, but sometimes, and most commonly with red lead, and the darkest touches with thick red inke, or Spanish brown, sometimes for varieties sake it is shadowed with Copper green thick, and sometimes with blew Bice, or blew Verdirure, and with any other beautifull colour.

11. Saffron is shadowed with thick red ink or Lake.
12. Light Matlicote, with the thin water of Red lead.
- 13, 14. White Ceruse, and white lead with a little black amongst some of it mingled.
15. Spanish brown with black, but that is not used in any bright garment.
16. Umber with black mingled with some of it.
17. Black cannot be shadowed with any colour darker than it self.

Directions for the laying on of your Colours.

1. **Y**OU must lay your colours on of such a thickness, I mean your bodied colours, that you may see how to shadow them to perceive where the shadows are, & not lay on your colour so thick that you cannot perceive the print, nor how and where to shadow it.
2. You must alwayes lay on your lightest colours first, and then shadow them afterwards.
3. You must lay on your colours very smooth with your Pensill, that the colour may not lie thicker in some places than in other, and to that end you should take your Pensil pretty full of colour when you should cover a garment all over (otherwise not) that so you may lay the colour smooth before it dry, for you cannot well smooth them afterwards when they are once dry; therefore when you lay them on be as quick as you can in covering the garment, that you may have covered it all over before your colour be dry in any part, for by this meanes you shall be the better able to lay it smooth; some colours are harder to lay then others; those that are the most sandy colours, as Verditer, Bise, red lead, &c. are hardest to lay smooth on, and therefore you must be the more carefull in them.

What colours set off the best together.

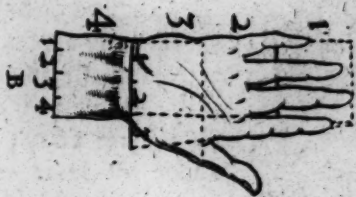
1. **B**lews set off well enough with red, yellows, whites, browns, and blacks. They set off best with reds, whites and browns. They set not off well with greens and purples.
2. Greens set off well with purples, reds yellows or browns. They set off best with purples and reds. They set not off well with blews or blacks, nor whites, unlesse it be a sad green.
3. Reds set off well with yellows, blews, greens and whites. They set off best with yellows and blews. They set not off with purples browns or blacks.
4. Yellows set off well with reds, sad blews, greens, browns, purples. They set off best with reds and blews. They set not off well with light greens or blacks or whites.
5. Whites set off with all colours. They set off best with black and blew.
6. Browns set off very well with no colour, but are used sometimes upon necessity; they set off worst of all with black because they are so near alike.
7. Blacks are not used but upon necessary occasions in some things that do needfully require it; and so it sets off well enough with almost any colour, because it is not like any, but differs somewhat from all.

How to write Gold with Pen or Pensill.

TAKE a shell of Gold, and put a little Gum-water into it, and so stir it about with your Pensil, but you must put very little Gum-water, and then you may use it as you do other colours.

K

Thus



*The particularities of Hands, scene
Within, without, or on the Palm, on the Back
or Sydenhij.*

The proportion of the Hand consisteth of 3 measures of the Note of which you are to make the three equally prick'd figures marked perpendicularly 1. 2. 3. the lowest of which figures is divided into 2 equal parts thereby to divide a half making a third part unto that half marked also 1. 2. 3. which we give unto the Rule of the Thumb and Forefinger leave unto the said Thumb, rayling a prick'd line perpendicularly upon the top of the right hand angle of the figure marked above with a making a prick'd quill within the which the said Forefinger is conveyed the length and scope thereof exceeding the upper joint of the Middle finger. These being divided into 2 equal parts the two equally jointed are the two upper parts shall be of equal height unto the upper joint of the Middle finger, as appeared in the figure of 3 M and represented as D. and the Thumb shall not exceed a second or middle joint of the Fore finger. Then reach a 4th measure for 3 M which is the measure of 3 M and represented as B. and the Thumb shall not exceed a second or middle joint of the Fore finger. And observed also in the hand figure without or on the back marked A as in 3 had fence or wth 3 palm or side only marked wth A as C. but 3 had fence p^{ro}longe sideways that 3 measures of 3 half of 3 Wth appeared in 3 figure of 3 said hand marked in 3 opposite page in 3 figure or Dyzion will in 3 marked in the oval forms marked 1. 2. 3. 4. under 3 joints wth many 3 somewhat 3 joint of 3 said Wth

Thus by a little practise you may become perfect in this Art, and learn the full perfection of it.

How to lay Gold or Silver on Gum-water.

Take five or six leaves of Gold or Silver, and grind them with a stiff Gum-water, and a pretty quantity of Salt, as fine as possible you can, then put them in to a Jar glasse, and fill the glasse almost full of faire water, to the end the stiff water may dissolve, and so the Gold goe to the bottome, let it stand three or foure houres, then poure away the liquor from the Gold, and put in more clean water, and stir it about, and let it settle again, and then poure the same water to this so often untill you see your Gold or Silver clean washed: then take a clean water, and put thereto a little piece of Sal Almoniack, and great Salt, and let it stand the space of three dayes in a box made of wax, or in some close space: then take a peice of Glovers leather, and pick away the Skin side and put the Gold and the water therein, tie it up, then hang it on a pin, and the salt will fret through, and the Gold will remain which you shall temper with the glayr of an egge, and so use it with pen or penfill.

You must diaper on Gold with Lake and yellow Oker, put on Silver with Ceruse.

Let your Gum water be made good and stiff, & lay it on with your Penfill where you would gild, then take a cushion that hath a smooth leather, and turn the bottome upward, upon that cut your Gold with a sharpe knife, in what quantity you will, and to take it up draw the edge of your knife finely upon your tongue, that it may be only wet, with which do but touch the edge of your Gold, and it will come up, and you may use it as you list, but before you lay it on, let your Gum be almost dry and being laid presse it down hard with the scut of an Hare, afterwads burnish it with a dogs tooth.

Of Limning.

Limning consisteth not only in the true proportioning of a picture, but also in the neat and lively coloring of the same, whereby the work is exceedingly graced, and most lively set out in proper colours, most nearly resembling the life.

How to chuse your Pensills

Let them be clean and sharp poynted, not cleaving in two in the hair, they must be full and thick next the quill, and so descending into a round and sharpe poynt; if you find any one hair longer than another take it away with the flame of a candle, passing the Pensill through the flame, you must have severall Pensills for severall colours.

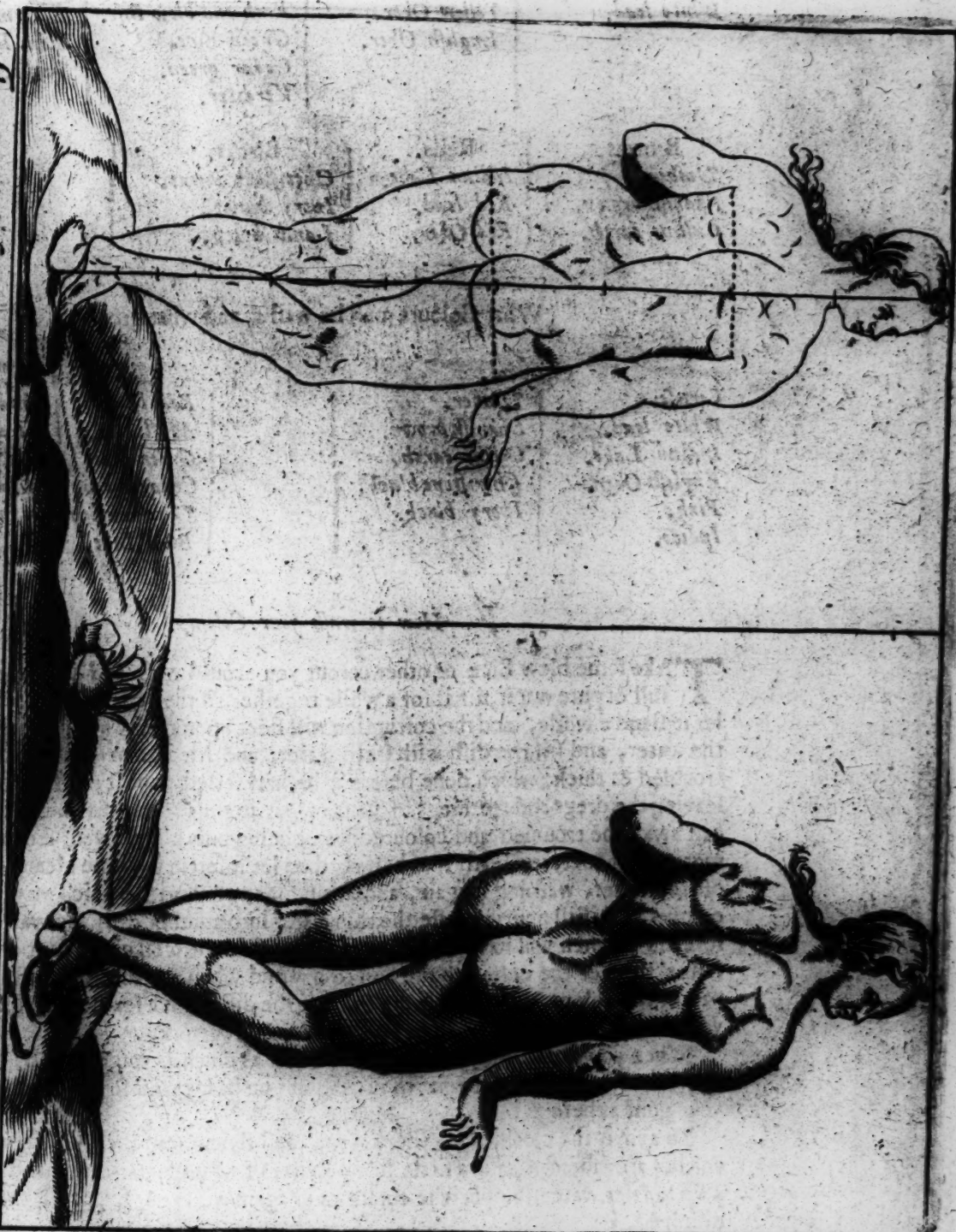
Gum-Araback.

Amongst all your colours you must mingle Gum-Araback, the best and whitest, which you should have alwayes ready, finely poudred (or dissolv'd in fair water) and so with a few drops of pure water, mingle it with your colour, and temper them together till the Gum be dissolved and incorporated with the colours.

How to grind your colours.

You must grind your colour either upon a perphire, Serpentine, or pebble stone, which are the hardest, and therefore the best to grind upon; grind them with fair water only, without Gum, and when you have ground them very fine, put them upon a chalk-stone, and there let them dry, and when they are dry take them off from the chalk and reserve them for your use, in papers or boxes,

The



The proportion of a woman standing backe. The same matter as you make the former figure, you may use in this
 backward of the woman, without altering any thing of the measure, except in observing the muscles, which are
 marked behind must be made sweeter & smoother then the mans, as appears in this figure.

The Names of your Colours.

Whites.	Yellows.	Greens.	Blews.
<i>Ceruse.</i>	<i>Masticote.</i>	<i>Sap green.</i>	<i>Indico.</i>
<i>White lead.</i>	<i>Yellow Oker.</i>	<i>Pink and blew Bise.</i>	<i>Ultramarine.</i>
	<i>English Oker.</i>	<i>Green Bice.</i>	<i>Blew Bice.</i>
		<i>Cedar green.</i>	<i>Smalt.</i>
		<i>Verditer.</i>	
Browns.	Reds.	Blacks.	
<i>Umber.</i>	<i>Indian Lake.</i>	<i>Cheristone burnt.</i>	
<i>Spanish brown.</i>	<i>Red lead.</i>	<i>Ivory burnt.</i>	
<i>Cullins earth.</i>	<i>Red Oker.</i>	<i>Lamb black.</i>	

What Colours must be washt, and what ground.

Ground.	Washt.
<i>Ceruse.</i>	<i>Red lead.</i>
<i>White lead.</i>	<i>Masticote.</i>
<i>Indian Lake.</i>	<i>Green Bice.</i>
<i>English Oker.</i>	<i>Cedar green.</i>
<i>Pink.</i>	<i>Ultramarine</i>
<i>Indico.</i>	<i>Blew Bice.</i>
	<i>Smalt.</i>
	<i>Verditer.</i>
	<i>Sap green.</i>
	<i>is to be steeped in water.</i>

How to wash your Colours.

TAKE some blew Bice or other colour you would wash and put it into a dish full of pure water, stir it for a while together, till the water be all coloured, then let it stand a while, and the corruption will fleet upon the water, then poure away the water, and fill the dish with fresh water, and stir it as before till the water be troubled & thick; which done, before it be half settled, pour it out into another dish leaving the dregs and seethings of your colour in the former dish, which you must cast away, the troubled and coloured water being poured into your second dish, put more water to it, and wash it as before, then let it settle till it be clear, and so poure off the water, washing it again, and again, if any scum arise which may make foure or five sorts, still pouring halfe the thin water into another dish, and washing it as aforesaid; when you have washed it often, and find it well cleansed, pour away the water, then set the colour in the Sun to dry, and when it is dry, strike off the faintest part of the colour, lying about the sides of the dish with a feather, and so use it for your finest work, the rest will serve well for courser work.

When you would use your colour, take of it as much as you can well spread about the sides of a shell, somewhat thin, and not on heaps, and so temper it finely with your gum as before.

To avoyd the cracking of your colour, and flying from the shell, to which some colours are subject; take a little fine powder of white Sugar-candy, and with it and a little safer water temper the colour over again with your finger till the candy be dissolved.

Colours for Garments.

To make a
 { Grasse green is made of Pink and Bice, it is shadowed with Indico and Pink.
 { Popinja green of Indico and more Pink, shadowed with Indico.
 { French green of Pink and Indico ————— Indico
 { Sea green of Bice Pink and white ————— Indico
 L Carnation

The proportion of a Child behind. The former rule without changing any thing, must be observed in this present figure standing backward, and all the proportions and measures which are observed in the former, serve to this likewise.



To make a	Carnation of Lake and white	Lake
	Crimson of Vermillion Lake and white	Lake
	Scarlet, Vermillion	Lake
	Purple, Bice Lake and white	Lake and Indico
	Violet, Bice and Lake	Indico
	Yellow made of Masticote, Pink and Saffron shadow with Lake and Saffron	
	Straw colour, most Pink, Saffron, white and Vermillion	Lake
	Orange Tauny, Vermillion, Pink and Masticote	Lake
	Ash colour, Lamb black and white	Black
	Skie colour, Bice and white	Bice
	Light hair colour, Umber, yellow Oker and white	Umber
	Sid hair colour, Umber, Oker and black	Umber and black

Thus by a little practising you may learn to mingle and compound all other colours whatsoever.

The manner of working.

1. **T**he manner of working in limning, is by little small pricks with a sharp pointed pensill.
2. You must lay your colours on very faint at first, and so make them deeper and deeper by degrees, for if you lay it on too sad at the first, it is impossible you should well recover it to make it lighter, but if it be too light you may make it darker at your pleasure.
3. When you would work, you must first lay on flat primer, which must be of the lightest part of the complexion you intend to make, so that you may not need to heighten; or lay a lighter upon it; you make a light complexion of white Lake, and red lead temper'd together in a shet, if it be a swarthy complexion, mingle a little fine Masticote or English Oker, or both with the complexion; having laid on the primer which you must do very quick and smooth, then draw the features after the primer is dry with Lake and white very faintly, and so proceed to the perfecting of it by degrees.

Colours for the Face.

For the red in the cheeks, lips, &c. temper lake, red lead, and a little white together, for the faint shadows that are blewish, Indico and white together, for bice is not used in a face, nor any black; for the deeper shadows take white English Oker and Umber, and for dark and hard shadows in many pictures, use Lake and Pinke mixt with Umber.

When you are come to the close of your, and have almost finisht your face, you must in the last place do all the scars, molds, smiling and glancings of the eye descending and contracting of the mouth, all which you must be sudden to express with a bold quick and constant hand, or remembering alwayes not to depend too fast.

Thus by a constant practise joyned with these directions and your own industry, you may in time attain to a great measure of perfection in this Art of Limning.

*Be patient, thou that seekest for this skill,
By grace and Art, so mayest thou have thy will.*

F I N I S.

